

# CALIFORNIA HIGH-SPEED TRAIN

Project Environmental Impact Report/Environmental Impact Statement

FINAL

Merced to Fresno Section  
Project EIR/EIS

## Volume III:

## Section G1 – Roadway and Grade Separation Plans

UPRR/SR 99 Alternative with Ave 24 Wye

April 2012




**CALIFORNIA**  
High-Speed Rail Authority



**U.S. Department of Transportation**  
Federal Railroad Administration



LOCATION NO.	SHT NO.	DWG NO.	DRAWING TITLE LINE 3	DRAWING TITLE LINE 4	DRAWING TITLE LINE 5	DRAWING TITLE LINE 6
GENERAL						
		B5090-B	UPRR/SR99 - (AVE 24)	GENERAL	INDEX OF DRAWINGS	SHEET 1 OF 3
		B5091-B	UPRR/SR99 - (AVE 24)	GENERAL	INDEX OF DRAWINGS	SHEET 2 OF 3
		B5092-B	UPRR/SR99 - (AVE 24)	GENERAL	INDEX OF DRAWINGS	SHEET 3 OF 3
		B5093-B	UPRR/SR99 - (AVE 24/WC)	GENERAL	ABBREVIATIONS, SYMBOLS AND NOTES	SHEET 1 OF 1
		B5100-B	UPRR/SR99 - (AVE 24)		INDEX MAP	SHEET 1 OF 5
		B5101-B	UPRR/SR99 - (WC)		INDEX MAP	SHEET 2 OF 5
		B5102-B	UPRR/SR99 - (AVE 24)		INDEX MAP	SHEET 3 OF 5
		B5103-B	UPRR/SR99 - (AVE 24)		INDEX MAP	SHEET 4 OF 5
		B5104-B	UPRR/SR99 - (WC)		INDEX MAP	SHEET 5 OF 5
		CB5100-B	UPRR/SR99 MAINLINE/WYE - (AVE 24/WC)	GRADE SEPARATION - HEMLOCK RD (ROAD 9) ALT 1	KEY MAP	SHEET 1 OF 1
		CB5101-B	UPRR/SR99 MAINLINE/WYE - (AVE 24)	GRADE SEPARATION - ROAD 9 ALONG EXIST ALT 2	KEY MAP	SHEET 1 OF 1
		CB5102-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - ROAD 13	KEY MAP	SHEET 1 OF 1
		CB5103-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - ROAD 15	KEY MAP	SHEET 1 OF 1
		CB5104-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - ROAD 16	KEY MAP	SHEET 1 OF 1
		CB5105-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - AVENUE 23 1/2	KEY MAP	SHEET 1 OF 1
		CB5106-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - AVENUE 25	KEY MAP	SHEET 1 OF 1
		CB5107-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - AVENUE 26	KEY MAP	SHEET 1 OF 1
		CB5108-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - CROSS ROAD	KEY MAP	SHEET 1 OF 1
		CB5109-B	UPRR/SR99 MAINLINE/WYE - (WC)	GRADE SEPARATION - ROAD 10 ALT 1	KEY MAP	SHEET 1 OF 1
		CB5110-B	UPRR/SR99 MAINLINE/WYE - (WC)	GRADE SEPARATION-ROAD 10 ALONG EXIST ALT 2	KEY MAP	SHEET 1 OF 1
		CB5111-B	UPRR/SR99 MAINLINE/MERCED DO - (WC)	GRADE SEPARATION - ROAD 13	KEY MAP	SHEET 1 OF 1
		CB5112-B	UPRR/SR99 MAINLINE DO/MERCED DO - (WC)	GRADE SEPARATION - ROAD 15	KEY MAP	SHEET 1 OF 1
		CB5113-B	UPRR/SR99 MAINLINE DO - (WC)	GRADE SEPARATION - ROAD 16	KEY MAP	SHEET 1 OF 1
		CB5114-B	UPRR/SR99 MAINLINE DO - (WC)	GRADE SEPARATION - AVENUE 23 1/2	KEY MAP	SHEET 1 OF 1
		CB5115-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 25	KEY MAP	SHEET 1 OF 1
		CB5116-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 26 ALT 1	KEY MAP	SHEET 1 OF 1
		CB5117-B	UPRR/SR99 MERCED DO - (WC)	GRADE SEPARATION - CROSS ROAD	KEY MAP	SHEET 1 OF 1
		CB5118-B	UPRR/SR99 WYE/MERCED DO - (WC)	UNDERPASS - AVENUE 26 ALT 2	KEY MAP	SHEET 1 OF 1
		CT5090-B	UPRR/SR99 - (AVE 24)	GRADE SEPARATIONS	TYPICAL CROSS SECTIONS	SHEET 1 OF 1
		CT5091-B	UPRR/SR99 - (AVE 24/WC)		GENERAL STAGE CONSTRUCTION AND TRAFFIC PLAN	SHEET 1 OF 1
LAYOUT						
13		CT5100-B	UPRR/SR99 MAINLINE/WYE - (AVE 24/WC)	GRADE SEPARATION - HEMLOCK RD (ROAD 9) ALT 1	LAYOUT	SHEET 1 OF 4
13		CT5101-B	UPRR/SR99 MAINLINE/WYE - (AVE 24/WC)	GRADE SEPARATION - HEMLOCK RD (ROAD 9) ALT 1	LAYOUT	SHEET 2 OF 4
13		CT5102-B	UPRR/SR99 MAINLINE/WYE - (AVE 24/WC)	GRADE SEPARATION - HEMLOCK RD (ROAD 9) ALT 1	LAYOUT	SHEET 3 OF 4
13		CT5103-B	UPRR/SR99 MAINLINE/WYE - (AVE 24/WC)	GRADE SEPARATION - HEMLOCK RD (ROAD 9) ALT 1	LAYOUT	SHEET 4 OF 4
12		CT5104-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - ROAD 13	LAYOUT	SHEET 1 OF 4
12		CT5105-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - ROAD 13	LAYOUT	SHEET 2 OF 4
12		CT5106-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - ROAD 13	LAYOUT	SHEET 3 OF 4
12		CT5107-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - ROAD 13	LAYOUT	SHEET 4 OF 4
11		CT5108-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - ROAD 15	LAYOUT	SHEET 1 OF 3
11		CT5109-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - ROAD 15	LAYOUT	SHEET 2 OF 3
11		CT5110-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - ROAD 15	LAYOUT	SHEET 3 OF 3
10		CT5111-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - ROAD 16	LAYOUT	SHEET 1 OF 3
10		CT5112-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - ROAD 16	LAYOUT	SHEET 2 OF 3
10		CT5113-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - ROAD 16	LAYOUT	SHEET 3 OF 3
9		CT5114-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - AVENUE 23 1/2	LAYOUT	SHEET 1 OF 4
9		CT5115-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - AVENUE 23 1/2	LAYOUT	SHEET 2 OF 4
9		CT5116-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - AVENUE 23 1/2	LAYOUT	SHEET 3 OF 4
9		CT5117-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - AVENUE 23 1/2	LAYOUT	SHEET 4 OF 4
8		CT5118-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - AVENUE 25	LAYOUT	SHEET 1 OF 5
8		CT5119-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - AVENUE 25	LAYOUT	SHEET 2 OF 5
8		CT5120-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - AVENUE 25	LAYOUT	SHEET 3 OF 5
8		CT5121-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - AVENUE 25	LAYOUT	SHEET 4 OF 5
8		CT5122-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - AVENUE 25	LAYOUT	SHEET 5 OF 5
7		CT5123-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - AVENUE 26	LAYOUT	SHEET 1 OF 3
7		CT5124-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - AVENUE 26	LAYOUT	SHEET 2 OF 3
7		CT5125-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - AVENUE 26	LAYOUT	SHEET 3 OF 3
6		CT5126-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - CROSS ROAD	LAYOUT	SHEET 1 OF 3
6		CT5127-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - CROSS ROAD	LAYOUT	SHEET 2 OF 3
6		CT5128-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - CROSS ROAD	LAYOUT	SHEET 3 OF 3
32		CT5129-B	UPRR/SR99 MAINLINE/WYE - (WC)	GRADE SEPARATION - ROAD 10 ALT 1	LAYOUT	SHEET 1 OF 3
32		CT5130-B	UPRR/SR99 MAINLINE/WYE - (WC)	GRADE SEPARATION - ROAD 10 ALT 1	LAYOUT	SHEET 2 OF 3
32		CT5131-B	UPRR/SR99 MAINLINE/WYE - (WC)	GRADE SEPARATION - ROAD 10 ALT 1	LAYOUT	SHEET 3 OF 3
31		CT5132-B	UPRR/SR99 MAINLINE/MERCED DO - (WC)	GRADE SEPARATION - ROAD 13	LAYOUT	SHEET 1 OF 5
31		CT5133-B	UPRR/SR99 MAINLINE/MERCED DO - (WC)	GRADE SEPARATION - ROAD 13	LAYOUT	SHEET 2 OF 5
31		CT5134-B	UPRR/SR99 MAINLINE/MERCED DO - (WC)	GRADE SEPARATION - ROAD 13	LAYOUT	SHEET 3 OF 5
31		CT5135-B	UPRR/SR99 MAINLINE/MERCED DO - (WC)	GRADE SEPARATION - ROAD 13	LAYOUT	SHEET 4 OF 5
31		CT5136-B	UPRR/SR99 MAINLINE/MERCED DO - (WC)	GRADE SEPARATION - ROAD 13	LAYOUT	SHEET 5 OF 5
30		CT5138-B	UPRR/SR99 MAINLINE DO/MERCED DO - (WC)	GRADE SEPARATION - ROAD 15	LAYOUT	SHEET 1 OF 4

						DESIGNED BY D. AYELE	RECORD SET 15% DESIGN SUBMITTAL	AECOM Technical Services, Inc. 2020 L Street, Suite 300 Sacramento, CA 95811		CALIFORNIA HIGH-SPEED RAIL AUTHORITY	CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO UPRR/SR99 - (AVE 24) GENERAL INDEX OF DRAWINGS SHEET 1 OF 3	CONTRACT NO. HSR06-007
						DRAWN BY C. DELOS REYES						DRAWING NO. B5090-B
						CHECKED BY A. SILVER						SCALE NONE
						IN CHARGE A. BOONE						SHEET NO. ### OF ###
REV	DATE	BY	CHK	APP	DESCRIPTION	DATE 06/30/2011	NOT FOR CONSTRUCTION					



LOCATION NO.	SHT NO.	DWG NO.	DRAWING TITLE LINE 3	DRAWING TITLE LINE 4	DRAWING TITLE LINE 5	DRAWING TITLE LINE 6
30		CT5139-B	UPRR/SR99 MAINLINE DO/MERCED DO - (WC)	GRADE SEPARATION - ROAD 15	LAYOUT	SHEET 2 OF 4
30		CT5140-B	UPRR/SR99 MAINLINE DO/MERCED DO - (WC)	GRADE SEPARATION - ROAD 15	LAYOUT	SHEET 3 OF 4
30		CT5141-B	UPRR/SR99 MAINLINE DO/MERCED DO - (WC)	GRADE SEPARATION - ROAD 15	LAYOUT	SHEET 4 OF 4
29		CT5142-B	UPRR/SR99 MAINLINE DO - (WC)	GRADE SEPARATION - ROAD 16	LAYOUT	SHEET 1 OF 4
29		CT5143-B	UPRR/SR99 MAINLINE DO - (WC)	GRADE SEPARATION - ROAD 16	LAYOUT	SHEET 2 OF 4
29		CT5144-B	UPRR/SR99 MAINLINE DO - (WC)	GRADE SEPARATION - ROAD 16	LAYOUT	SHEET 3 OF 4
29		CT5145-B	UPRR/SR99 MAINLINE DO - (WC)	GRADE SEPARATION - ROAD 16	LAYOUT	SHEET 4 OF 4
28		CT5146-B	UPRR/SR99 MAINLINE DO - (WC)	GRADE SEPARATION - AVENUE 23 1/2	LAYOUT	SHEET 1 OF 4
28		CT5147-B	UPRR/SR99 MAINLINE DO - (WC)	GRADE SEPARATION - AVENUE 23 1/2	LAYOUT	SHEET 2 OF 4
28		CT5148-B	UPRR/SR99 MAINLINE DO - (WC)	GRADE SEPARATION - AVENUE 23 1/2	LAYOUT	SHEET 3 OF 4
28		CT5149-B	UPRR/SR99 MAINLINE DO - (WC)	GRADE SEPARATION - AVENUE 23 1/2	LAYOUT	SHEET 4 OF 4
27		CT5151-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 25	LAYOUT	SHEET 1 OF 12
27		CT5152-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 25	LAYOUT	SHEET 2 OF 12
27		CT5153-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 25	LAYOUT	SHEET 3 OF 12
27		CT5154-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 25	LAYOUT	SHEET 4 OF 12
27		CT5155-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 25	LAYOUT	SHEET 5 OF 12
27		CT5156-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 25	LAYOUT	SHEET 6 OF 12
27		CT5157-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 25	LAYOUT	SHEET 7 OF 12
27		CT5158-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 25	LAYOUT	SHEET 8 OF 12
27		CT5159-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 25	LAYOUT	SHEET 9 OF 12
27		CT5160-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 25	LAYOUT	SHEET 10 OF 12
27		CT5161-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 25	LAYOUT	SHEET 11 OF 12
27		CT5162-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 25	LAYOUT	SHEET 12 OF 12
26		CT5168-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 26 ALT 1	LAYOUT	SHEET 1 OF 10
26		CT5169-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 26 ALT 1	LAYOUT	SHEET 2 OF 10
26		CT5170-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 26 ALT 1	LAYOUT	SHEET 3 OF 10
26		CT5171-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 26 ALT 1	LAYOUT	SHEET 4 OF 10
26		CT5172-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 26 ALT 1	LAYOUT	SHEET 5 OF 10
26		CT5173-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 26 ALT 1	LAYOUT	SHEET 6 OF 10
26		CT5174-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 26 ALT 1	LAYOUT	SHEET 7 OF 10
26		CT5175-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 26 ALT 1	LAYOUT	SHEET 8 OF 10
26		CT5176-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 26 ALT 1	LAYOUT	SHEET 9 OF 10
26		CT5177-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 26 ALT 1	LAYOUT	SHEET 10 OF 10
25		CT5179-B	UPRR/SR99 MERCED DO - (WC)	GRADE SEPARATION - CROSS ROAD	LAYOUT	SHEET 1 OF 3
25		CT5180-B	UPRR/SR99 MERCED DO - (WC)	GRADE SEPARATION - CROSS ROAD	LAYOUT	SHEET 2 OF 3
25		CT5181-B	UPRR/SR99 MERCED DO - (WC)	GRADE SEPARATION - CROSS ROAD	LAYOUT	SHEET 3 OF 3
26		CT5187-B	UPRR/SR99 WYE/MERCED DO - (WC)	UNDERPASS - AVENUE 26 ALT 2	LAYOUT	SHEET 1 OF 3
26		CT5188-B	UPRR/SR99 WYE/MERCED DO - (WC)	UNDERPASS - AVENUE 26 ALT 2	LAYOUT	SHEET 2 OF 3
26		CT5189-B	UPRR/SR99 WYE/MERCED DO - (WC)	UNDERPASS - AVENUE 26 ALT 2	LAYOUT	SHEET 3 OF 3
13		CT5190-B	UPRR/SR99 MAINLINE/WYE - (AVE 24)	GRADE SEPARATION - ROAD 9 ALONG EXIST ALT 2	LAYOUT	SHEET 1 OF 3
13		CT5191-B	UPRR/SR99 MAINLINE/WYE - (AVE 24)	GRADE SEPARATION - ROAD 9 ALONG EXIST ALT 2	LAYOUT	SHEET 2 OF 3
13		CT5192-B	UPRR/SR99 MAINLINE/WYE - (AVE 24)	GRADE SEPARATION - ROAD 9 ALONG EXIST ALT 2	LAYOUT	SHEET 3 OF 3
32		CT5193-B	UPRR/SR99 MAINLINE/WYE - (WC)	GRADE SEPARATION-ROAD 10 ALONG EXIST ALT 2	LAYOUT	SHEET 1 OF 3
32		CT5194-B	UPRR/SR99 MAINLINE/WYE - (WC)	GRADE SEPARATION-ROAD 10 ALONG EXIST ALT 2	LAYOUT	SHEET 2 OF 3
32		CT5195-B	UPRR/SR99 MAINLINE/WYE - (WC)	GRADE SEPARATION-ROAD 10 ALONG EXIST ALT 2	LAYOUT	SHEET 3 OF 3
64		CT0149-A	UPRR MERCED CONNECTION - (AVE 24/WC)	GRADE SEPARATION - G STREET	LAYOUT	SHEET 1 OF 1
			PROFILE			
		CT5800-B	UPRR/SR99 - (AVE 24/WC)	GRADE SEPARATION	SUPERELEVATION TEMPLATE	SHEET 1 OF 4
		CT5801-B	UPRR/SR99 - (AVE 24/WC)	GRADE SEPARATION	SUPERELEVATION TEMPLATE	SHEET 2 OF 4
		CT5802-B	UPRR/SR99 - (AVE 24/WC)	GRADE SEPARATION	SUPERELEVATION TEMPLATE	SHEET 3 OF 4
		CT5803-B	UPRR/SR99 - (AVE 24/WC)	GRADE SEPARATION	SUPERELEVATION TEMPLATE	SHEET 4 OF 4
13		CT6100-B	UPRR/SR99 MAINLINE/WYE - (AVE 24/WC)	GRADE SEPARATION - HEMLOCK RD (ROAD 9) ALT 1	PROFILE	SHEET 1 OF 4
13		CT6101-B	UPRR/SR99 MAINLINE/WYE - (AVE 24/WC)	GRADE SEPARATION - HEMLOCK RD (ROAD 9) ALT 1	PROFILE	SHEET 2 OF 4
13		CT6102-B	UPRR/SR99 MAINLINE/WYE - (AVE 24/WC)	GRADE SEPARATION - HEMLOCK RD (ROAD 9) ALT 1	PROFILE	SHEET 3 OF 4
13		CT6103-B	UPRR/SR99 MAINLINE/WYE - (AVE 24/WC)	GRADE SEPARATION - HEMLOCK RD (ROAD 9) ALT 1	PROFILE	SHEET 4 OF 4
12		CT6104-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - ROAD 13	PROFILE	SHEET 1 OF 4
12		CT6105-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - ROAD 13	PROFILE	SHEET 2 OF 4
12		CT6106-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - ROAD 13	PROFILE	SHEET 3 OF 4
12		CT6107-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - ROAD 13	PROFILE	SHEET 4 OF 4
11		CT6108-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - ROAD 15	PROFILE	SHEET 1 OF 3
11		CT6109-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - ROAD 15	PROFILE	SHEET 2 OF 3
11		CT6110-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - ROAD 15	PROFILE	SHEET 3 OF 3
10		CT6111-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - ROAD 16	PROFILE	SHEET 1 OF 3
10		CT6112-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - ROAD 16	PROFILE	SHEET 2 OF 3
10		CT6113-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - ROAD 16	PROFILE	SHEET 3 OF 3
9		CT6114-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - AVENUE 23 1/2	PROFILE	SHEET 1 OF 4
9		CT6115-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - AVENUE 23 1/2	PROFILE	SHEET 2 OF 4
9		CT6116-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - AVENUE 23 1/2	PROFILE	SHEET 3 OF 4

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 06/30/2011

RECORD SET 15% DESIGN SUBMITTAL
NOT FOR CONSTRUCTION

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2M HILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 - (AVE 24)  
GENERAL  
INDEX OF DRAWINGS  
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. B5091-B
SCALE NONE
SHEET NO. ### OF ###

LOCATION NO.	SHT NO.	DWG NO.	DRAWING TITLE LINE 3	DRAWING TITLE LINE 4	DRAWING TITLE LINE 5	DRAWING TITLE LINE 6
9		CT6117-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - AVENUE 23 1/2	PROFILE	SHEET 4 OF 4
8		CT6118-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - AVENUE 25	PROFILE	SHEET 1 OF 5
8		CT6119-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - AVENUE 25	PROFILE	SHEET 2 OF 5
8		CT6120-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - AVENUE 25	PROFILE	SHEET 3 OF 5
8		CT6121-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - AVENUE 25	PROFILE	SHEET 4 OF 5
8		CT6122-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - AVENUE 25	PROFILE	SHEET 5 OF 5
7		CT6123-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - AVENUE 26	PROFILE	SHEET 1 OF 3
7		CT6124-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - AVENUE 26	PROFILE	SHEET 2 OF 3
7		CT6125-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - AVENUE 26	PROFILE	SHEET 3 OF 3
6		CT6126-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - CROSS RD	PROFILE	SHEET 1 OF 3
6		CT6127-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - CROSS RD	PROFILE	SHEET 2 OF 3
6		CT6128-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - CROSS RD	PROFILE	SHEET 3 OF 3
32		CT6129-B	UPRR/SR99 MAINLINE/WYE - (WC)	GRADE SEPARATION - ROAD 10 ALT 1	PROFILE	SHEET 1 OF 3
32		CT6130-B	UPRR/SR99 MAINLINE/WYE - (WC)	GRADE SEPARATION - ROAD 10 ALT 1	PROFILE	SHEET 2 OF 3
32		CT6131-B	UPRR/SR99 MAINLINE/WYE - (WC)	GRADE SEPARATION - ROAD 10 ALT 1	PROFILE	SHEET 3 OF 3
31		CT6132-B	UPRR/SR99 MAINLINE/MERCED DO - (WC)	GRADE SEPARATION - ROAD 13	PROFILE	SHEET 1 OF 5
31		CT6133-B	UPRR/SR99 MAINLINE/MERCED DO - (WC)	GRADE SEPARATION - ROAD 13	PROFILE	SHEET 2 OF 5
31		CT6134-B	UPRR/SR99 MAINLINE/MERCED DO - (WC)	GRADE SEPARATION - ROAD 13	PROFILE	SHEET 3 OF 5
31		CT6135-B	UPRR/SR99 MAINLINE/MERCED DO - (WC)	GRADE SEPARATION - ROAD 13	PROFILE	SHEET 4 OF 5
31		CT6136-B	UPRR/SR99 MAINLINE/MERCED DO - (WC)	GRADE SEPARATION - ROAD 13	PROFILE	SHEET 5 OF 5
30		CT6138-B	UPRR/SR99 MAINLINE DO/MERCED DO - (WC)	GRADE SEPARATION - ROAD 15	PROFILE	SHEET 1 OF 4
30		CT6139-B	UPRR/SR99 MAINLINE DO/MERCED DO - (WC)	GRADE SEPARATION - ROAD 15	PROFILE	SHEET 2 OF 4
30		CT6140-B	UPRR/SR99 MAINLINE DO/MERCED DO - (WC)	GRADE SEPARATION - ROAD 15	PROFILE	SHEET 3 OF 4
30		CT6141-B	UPRR/SR99 MAINLINE DO/MERCED DO - (WC)	GRADE SEPARATION - ROAD 15	PROFILE	SHEET 4 OF 4
29		CT6142-B	UPRR/SR99 MAINLINE DO - (WC)	GRADE SEPARATION - ROAD 16	PROFILE	SHEET 1 OF 4
29		CT6143-B	UPRR/SR99 MAINLINE DO - (WC)	GRADE SEPARATION - ROAD 16	PROFILE	SHEET 2 OF 4
29		CT6144-B	UPRR/SR99 MAINLINE DO - (WC)	GRADE SEPARATION - ROAD 16	PROFILE	SHEET 3 OF 4
29		CT6145-B	UPRR/SR99 MAINLINE DO - (WC)	GRADE SEPARATION - ROAD 16	PROFILE	SHEET 4 OF 4
28		CT6146-B	UPRR/SR99 MAINLINE DO - (WC)	GRADE SEPARATION - AVENUE 23 1/2	PROFILE	SHEET 1 OF 4
28		CT6147-B	UPRR/SR99 MAINLINE DO - (WC)	GRADE SEPARATION - AVENUE 23 1/2	PROFILE	SHEET 2 OF 4
28		CT6148-B	UPRR/SR99 MAINLINE DO - (WC)	GRADE SEPARATION - AVENUE 23 1/2	PROFILE	SHEET 3 OF 4
28		CT6149-B	UPRR/SR99 MAINLINE DO - (WC)	GRADE SEPARATION - AVENUE 23 1/2	PROFILE	SHEET 4 OF 4
27		CT6151-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 25	PROFILE	SHEET 1 OF 13
27		CT6152-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 25	PROFILE	SHEET 2 OF 13
27		CT6153-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 25	PROFILE	SHEET 3 OF 13
27		CT6154-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 25	PROFILE	SHEET 4 OF 13
27		CT6155-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 25	PROFILE	SHEET 5 OF 13
27		CT6156-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 25	PROFILE	SHEET 6 OF 13
27		CT6157-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 25	PROFILE	SHEET 7 OF 13
27		CT6158-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 25	PROFILE	SHEET 8 OF 13
27		CT6159-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 25	PROFILE	SHEET 9 OF 13
27		CT6160-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 25	PROFILE	SHEET 10 OF 13
27		CT6161-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 25	PROFILE	SHEET 11 OF 13
27		CT6162-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 25	PROFILE	SHEET 12 OF 13
27		CT6163-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 25	PROFILE	SHEET 13 OF 13
26		CT6167-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 26 ALT 1	PROFILE	SHEET 1 OF 10
26		CT6168-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 26 ALT 1	PROFILE	SHEET 2 OF 10
26		CT6169-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 26 ALT 1	PROFILE	SHEET 3 OF 10
26		CT6170-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 26 ALT 1	PROFILE	SHEET 4 OF 10
26		CT6171-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 26 ALT 1	PROFILE	SHEET 5 OF 10
26		CT6172-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 26 ALT 1	PROFILE	SHEET 6 OF 10
26		CT6173-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 26 ALT 1	PROFILE	SHEET 7 OF 10
26		CT6174-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 26 ALT 1	PROFILE	SHEET 8 OF 10
26		CT6175-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 26 ALT 1	PROFILE	SHEET 9 OF 10
26		CT6176-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 26 ALT 1	PROFILE	SHEET 10 OF 10
25		CT6177-B	UPRR/SR99 MERCED DO - (WC)	GRADE SEPARATION - CROSS ROAD	PROFILE	SHEET 1 OF 3
25		CT6178-B	UPRR/SR99 MERCED DO - (WC)	GRADE SEPARATION - CROSS ROAD	PROFILE	SHEET 2 OF 3
25		CT6179-B	UPRR/SR99 MERCED DO - (WC)	GRADE SEPARATION - CROSS ROAD	PROFILE	SHEET 3 OF 3
26		CT6185-B	UPRR/SR99 WYE/MERCED DO - (WC)	UNDERPASS - AVENUE 26 ALT 2	PROFILE	SHEET 1 OF 3
26		CT6186-B	UPRR/SR99 WYE/MERCED DO - (WC)	UNDERPASS - AVENUE 26 ALT 2	PROFILE	SHEET 2 OF 3
26		CT6187-B	UPRR/SR99 WYE/MERCED DO - (WC)	UNDERPASS - AVENUE 26 ALT 2	PROFILE	SHEET 3 OF 3
13		CT6188-B	UPRR/SR99 MAINLINE/WYE - (AVE 24)	GRADE SEPARATION - ROAD 9 ALONG EXIST ALT 2	PROFILE	SHEET 1 OF 3
13		CT6189-B	UPRR/SR99 MAINLINE/WYE - (AVE 24)	GRADE SEPARATION - ROAD 9 ALONG EXIST ALT 2	PROFILE	SHEET 2 OF 3
13		CT6190-B	UPRR/SR99 MAINLINE/WYE - (AVE 24)	GRADE SEPARATION - ROAD 9 ALONG EXIST ALT 2	PROFILE	SHEET 3 OF 3
32		CT6191-B	UPRR/SR99 MAINLINE/WYE - (WC)	GRADE SEPARATION-ROAD 10 ALONG EXIST ALT 2	PROFILE	SHEET 1 OF 3
32		CT6192-B	UPRR/SR99 MAINLINE/WYE - (WC)	GRADE SEPARATION-ROAD 10 ALONG EXIST ALT 2	PROFILE	SHEET 2 OF 3
32		CT6193-B	UPRR/SR99 MAINLINE/WYE - (WC)	GRADE SEPARATION-ROAD 10 ALONG EXIST ALT 2	PROFILE	SHEET 3 OF 3
64		CT1149-A	UPRR MERCED CONNECTION - (AVE 24/WC)	GRADE SEPARATION - G STREET	PROFILE	SHEET 1 OF 1

REV	DATE	BY	CHK	APP	DESCRIPTION

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CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 06/30/2011

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CALIFORNIA  
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO

UPRR/SR99 - (AVE 24)

GENERAL  
INDEX OF DRAWINGS  
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. B5092-B
SCALE NONE
SHEET NO. ### OF ###



3/28/2012 4:05:04 PM \\usstc2fp001\projects\60022962\Task-03\_Merced-Fresno\Cadd\Civil\Design\SANTA CLARA\delosreyesc\15% ROADWAY REVISIONS\VOL III FINAL SUBMITTAL\ROADWAY\SHEET\Package USER=ReyesC1

ABBREVIATIONS

ALIGNMENT

HORIZONTAL	
BC	BEGINNING OF CURVE
EC	END OF CURVE
PC	POINT OF CURVE
PCC	POINT OF COMPOUNT CURVES
PI	POINT OF INTERSECTION OF TWO TANGENTS
POB	POINT OF BEGINNING
POC	POINT ON CURVE
POE	POINT OF ENDING
POT	POINT ON TANGENT
PRC	POINT OF REVERSE CURVES
PT	POINT OF TANGENCY
R	RADIUS OF CURVATURE IN FEET
V, DS	DESIGN VELOCITY IN MILES PER HOUR
VERTICAL	
BVC	BEGIN OF VERTICAL CURVE
EVC	END OF VERTICAL CURVE
PVC	POINT OF VERTICAL CURVE (BEGINNING OF CURVE)
PVI	POINT OF VERTICAL INTERSECTION (OF TANGENTS)
PVT	POINT OF VERTICAL TANGENCY (ENDING OF CURVE)
VC	VERTICAL CURVE

MISCELLANEOUS

ALT	ALTERNATIVE
AVE	AVENUE
BB	BEGIN BRIDGE
BEG	BEGIN
BLVD	BOULEVARD
CL	CENTER LINE
CLR	CENTERLINE, CLASS
COL	COLUMN
DWG	DRAWING
EB	END BRIDGE
ELEV	ELEVATION
EQ	EQUATION
ES	EDGE OF SIDEWALK
ETW	EDGE OF TRAVELED WAY
EXIST(E)	EXISTING
FL	FLOW LINE
HORIZ	HORIZONTAL
HP	HINGE POINT
HST	HIGH SPEED TRAIN
HWY	HIGHWAY
IC	INTERCHANGE
IN	INCH
L	LENGTH
LT	LEFT
MBGR	METAL BEAM GUARD RAIL
ML	MAINLINE
MPH	MILES PER HOUR
MAX	MAXIMUM
MIN	MINIMUM
N	NORTH
NB	NORTH BOUND
No, NO	NUMBER
NTS	NOT TO SCALE
OG	ORIGINAL GROUND
O/H OH	OVERHEAD
PG&E	PACIFIC GAS & ELECTRIC
PGL, FG	PROFILE GRADE LINE
RET	RETAINING
RR	RAILROAD
RD	ROAD
R/W	RIGHT OF WAY
RT	RIGHT
SB	SOUTH BOUND
SHLD	SHOULDER
SR	STATE ROUTE
SHT	SHEET
SS	SANITARY SEWER
SSD	STOPPING SIGHT DISTANCE
ST	STREET
STA	STATION
STD	STANDARD
SD	STORM DRAIN
STRUCT, STR	STRUCTURE
T	TANGENT
TEL	TELEPHONE
	(OH) OVERHEAD LINE
	(UG) UNDERGROUND LINE

SYMBOLS

	MATCH LINE
	HST TRACK
	PROPOSED HST RIGHT-OF-WAY
	FREIGHT/PASSENGER TRACK - EXISTING
	EXISTING RIGHT-OF-WAY OR EXISTING BRIDGE FEATURES
	RETAINING WALLS
	ORIGINAL GROUND
	GAS LINE (16'')
	COMMUNICATION LINE
	WATER LINE
	FIBER OPTIC LINE
	ELECTRICAL LINE
	ELECTRICAL TOWER
	SEWER LINE
	STORM DRAIN LINE
	FUEL LINE
	TELEPHONE LINE
	PETROLEUM LINE (12'')
	OVERHEAD
	NORTH ARROW
	PVI
	MBGR
	DIRECTION OF TRAVEL
	PROPOSED CONTOUR

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IN CHARGE A. BOONE
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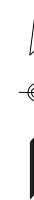
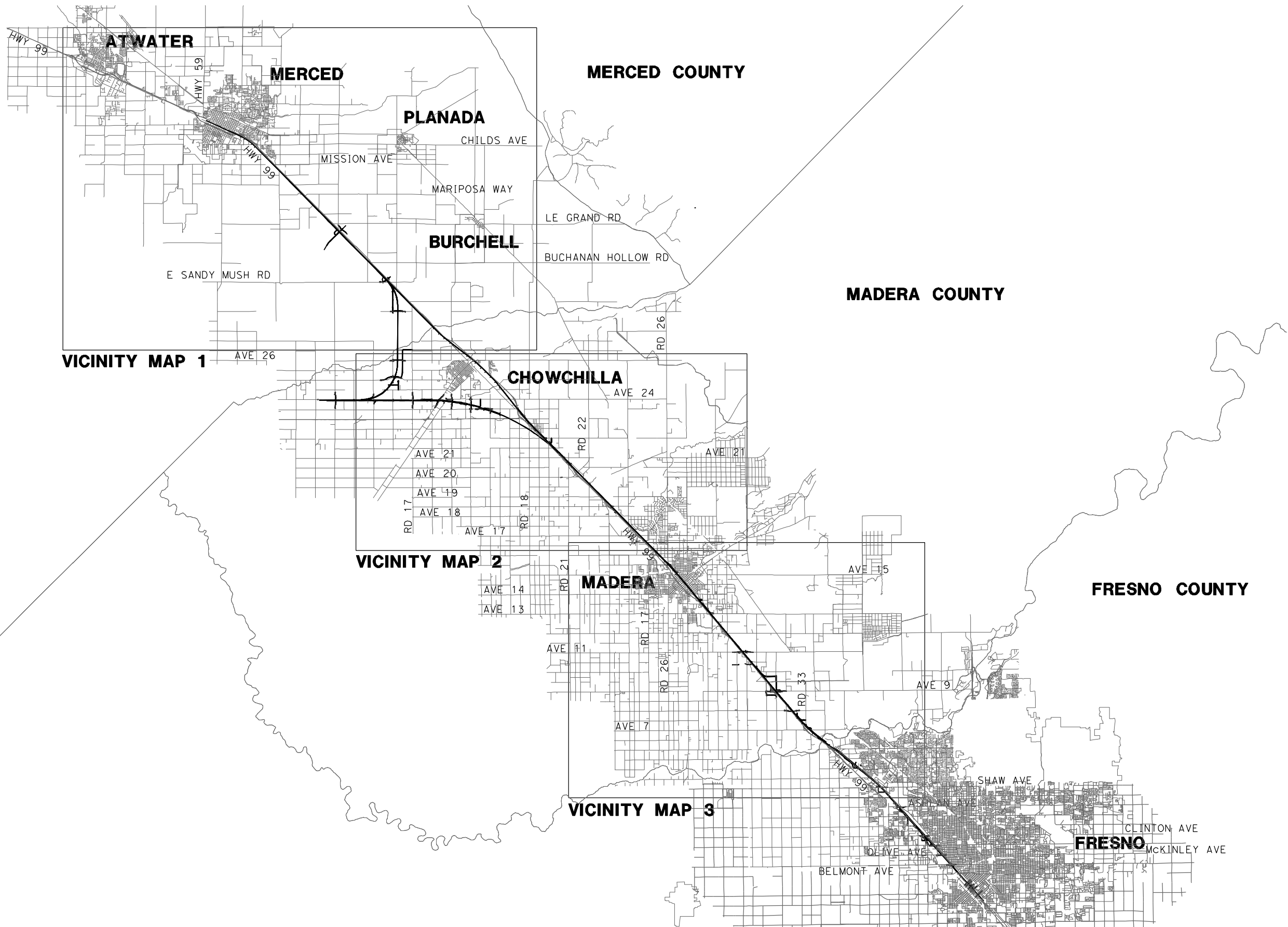


CALIFORNIA  
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO  
UPRR/SR99 - (AVE 24/WC)  
GENERAL  
ABBREVIATIONS, SYMBOLS AND NOTES  
SHEET 1 OF 1

CONTRACT NO. HSR06-007
DRAWING NO. B5093-B
SCALE NO SCALE
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A. TRINH  
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IN CHARGE  
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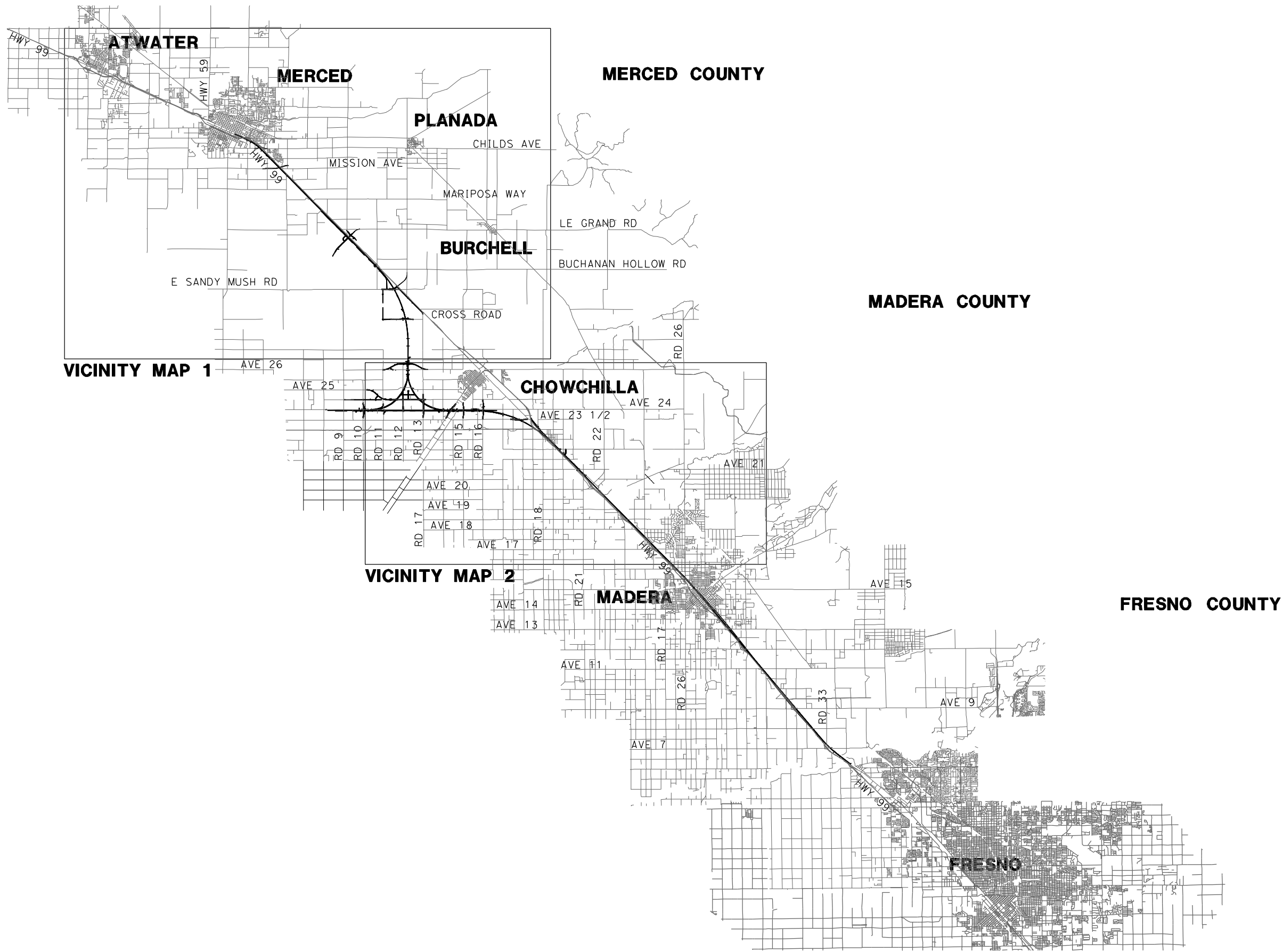
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 - (AVE 24)

INDEX MAP  
SHEET 1 OF 5

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DRAWING NO.	B5100-B
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ReyesC1



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1	12/28/11	RG			

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A. TRINH  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
06/30/2011

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**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPRR/SR99 - (WC)

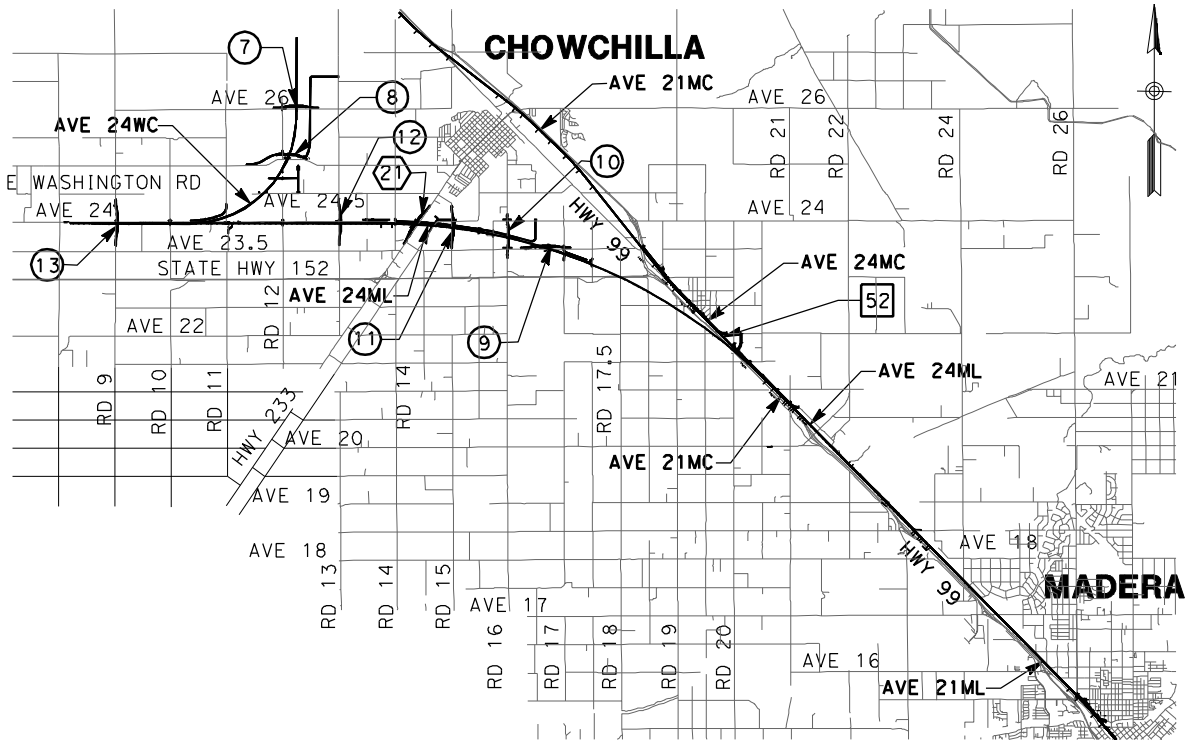
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SHEET 2 OF 5

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SCALE  
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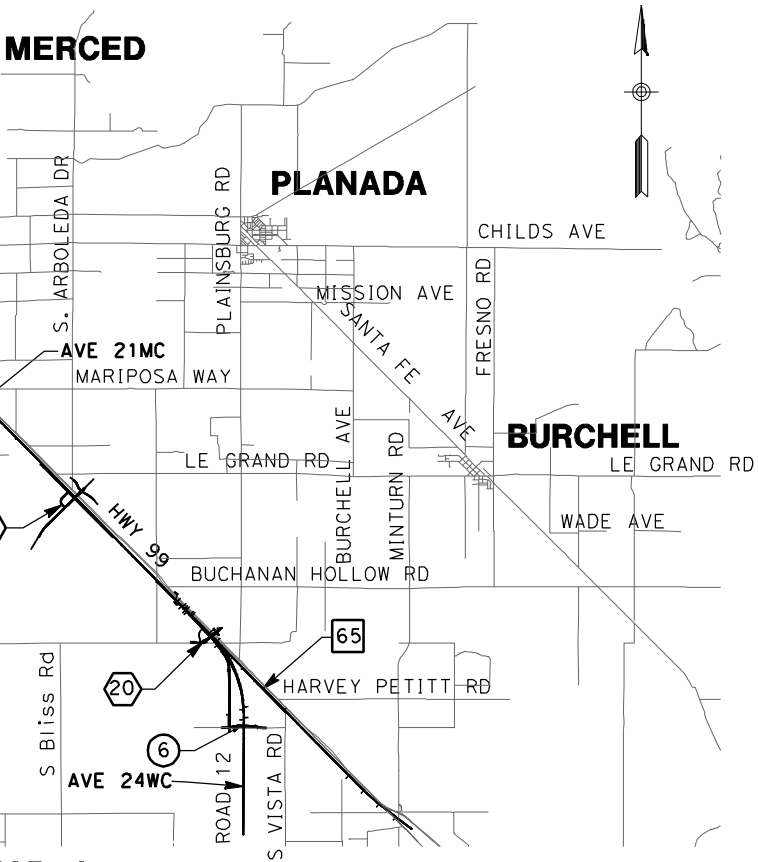
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oyeled

LOCATION NO.	SHEET TITLE	ROADWAY DWG NO.	STR DWG NO.
6	GRADE SEPARATION - CROSS RD	CT5126-B - CT5128-B	ST1127
7	GRADE SEPARATION - AVENUE 26	CT5123-B - CT5125-B	ST1126
8	GRADE SEPARATION - AVENUE 25	CT5118-B - CT5122-B	ST1125
9	GRADE SEPARATION - AVENUE 23 1/2	CT5114-B - CT5117-B	ST1124
10	GRADE SEPARATION - ROAD 16	CT5111-B - CT5113-B	ST1123
11	GRADE SEPARATION - ROAD 15	CT5108-B - CT5110-B	ST1122
12	GRADE SEPARATION - ROAD 13	CT5104-B - CT5107-B	ST1138
13	GRADE SEPARATION - HEMLOCK RD (ROAD 9) ALT 1  GRADE SEPARATION - ROAD 9 ALONG EXIST ALT 2	CT5100-B - CT5103-B  CT5190-B - CT5192-B	ST1120  ST1120
64	GRADE SEPARATION - G STREET	CT0149-A	ST1180
14	AVENUE 8 - OVERCROSSING	CT7100-B - CT7102-B	ST1107
15	AVENUE 9 - INTERCHANGE	CT7103-B - CT7109-B	ST1108 - ST1109
16	AVENUE 11 - OVERCROSSING	CT7110-B - CT7114-B	ST1110
19	GRADE SEPARATION - LE GRAND INTERCHANGE	CT7122-B - CT7128-B	ST1114
20	GRADE SEPARATION - SANDY MUSH RD INTERCHANGE	CT7119-B - CT7121-B	ST1142
21	GRADE SEPARATION - ROBERTSON BLVD (SR233) ALT 1  UNDERPASS - ROBERTSON BLVD (SR233) ALT 2	CT7115-B - CT7118-B  CT7137-B - CT7139-B	ST1141

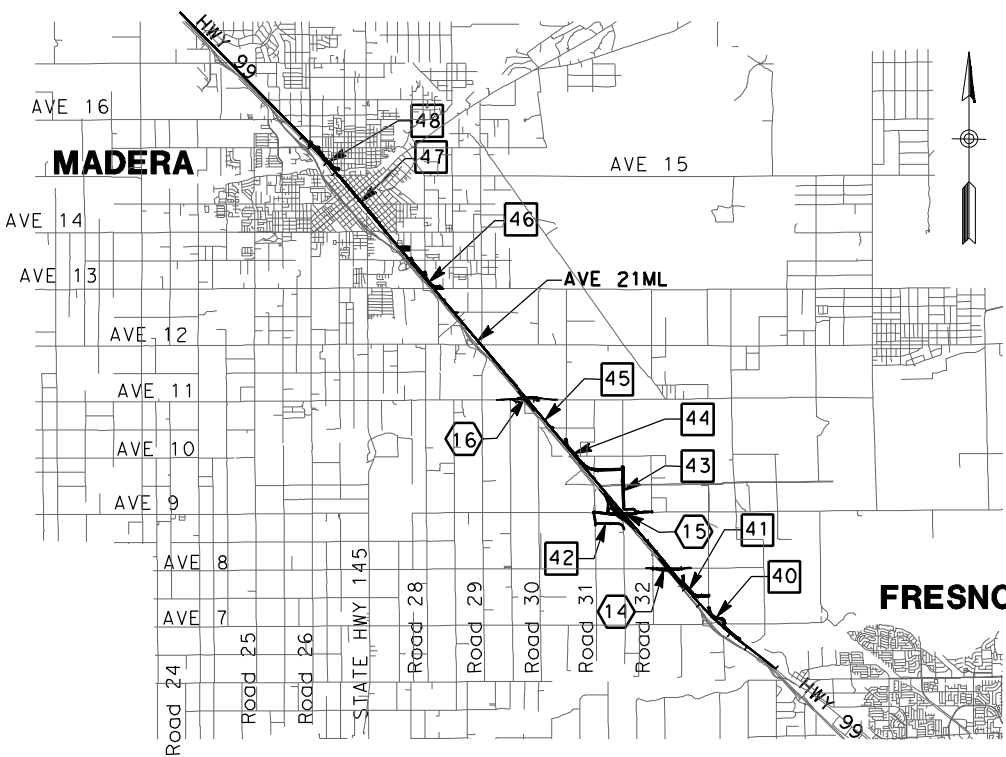
LOCATION NO.	SHEET TITLE	ROADWAY DWG NO.
40	ROAD 33	CR9100-B
41	PROPOSED ROAD	CR9101-B
42	ROAD 31 & GOLDEN STATE BLVD AT AVENUE 9	CR9102-B
43	ROAD 31 & GOLDEN STATE BLVD AT AVENUE 9 ROAD 31 1/2	CR9103-B CR9104-B
44	ROAD 30 1/2	CR9105-B - CR9106-B
45	FRONTAGE ROAD ROAD 30 AT AVENUE 11	CR9107-B CR9108-B - CR9109-B
46	S. KNOX ST	CR9110-B
48	SHARON BLVD & E ST	CR9111-B
47	N. E ST AND S. E ST	CR9112-B
52	FAIRMEAD BLVD	CR9113-B - CR9116-B
65	PROPOSED WEST FRONTAGE ROAD	CR9117-B - CR9118-B



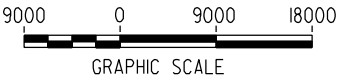
VICINITY MAP 2



VICINITY MAP 1



VICINITY MAP 3



LOCATION NUMBER LEGEND

- (X) - INDICATES GRADE SEPARATION
- (X) - INDICATES CALTRANS FACILITIES MODIFICATION
- (X) - INDICATES LOCAL ROAD RELOCATION

REV	DATE	BY	CHK	APP	DESCRIPTION

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DRAWN BY A. TRINH
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 06/30/2011

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CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO  
UPPR/SR99 - (AVE 24)

INDEX MAP  
SHEET 3 OF 5

CONTRACT NO. HSR06-007
DRAWING NO. B5102-B
SCALE NO SCALE
SHEET NO. ### OF ###

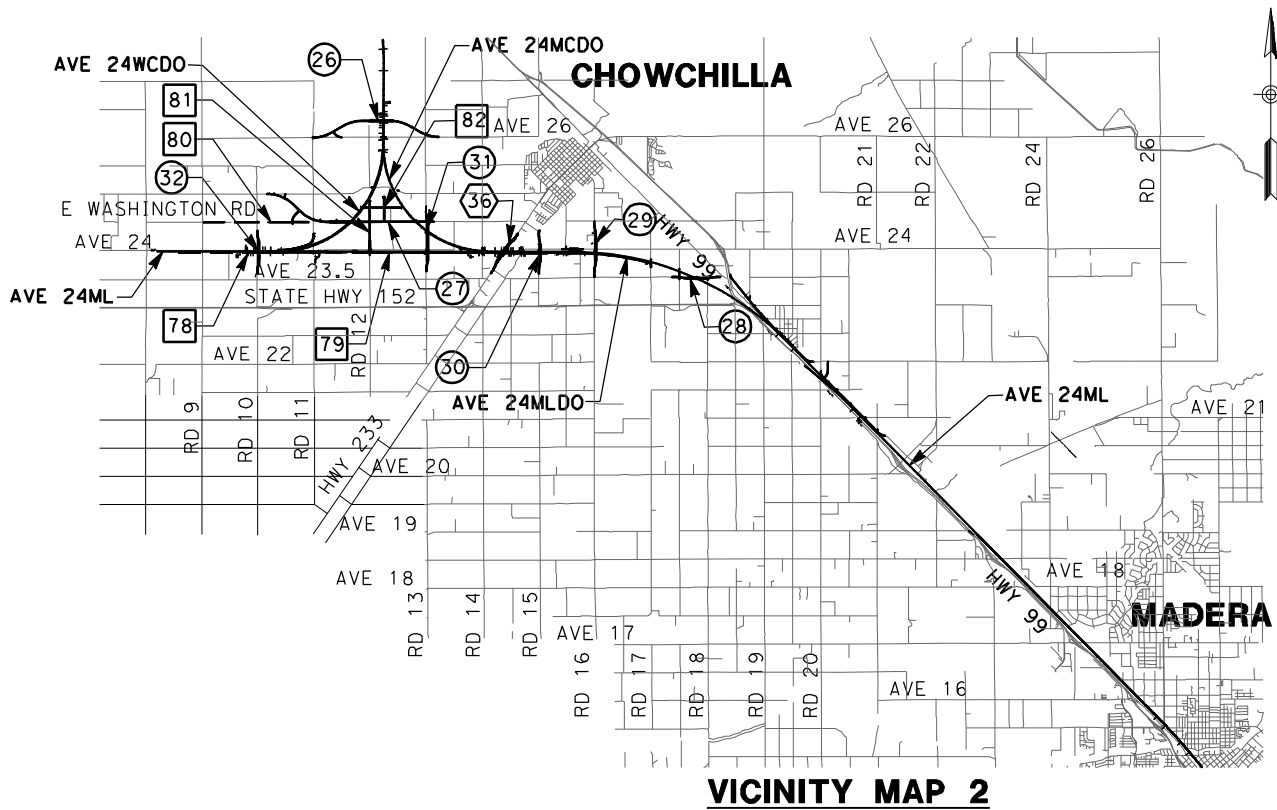
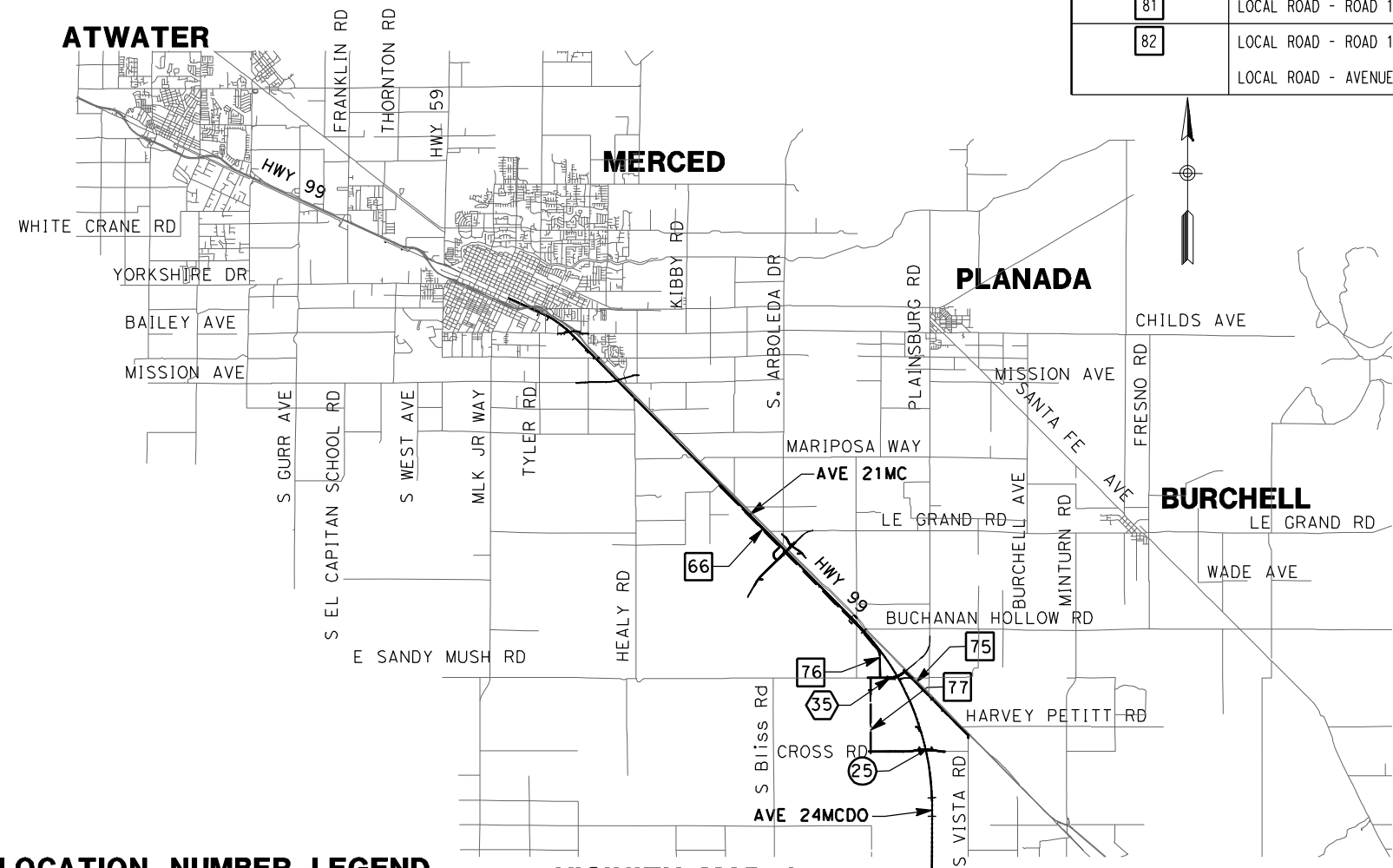




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LOCATION NO.	SHEET TITLE	ROADWAY DWG NO.	STR DWG NO.
25	GRADE SEPARATION - CROSS ROAD	CT5179-B - CT5181-B	ST1136
26	GRADE SEPARATION - AVENUE 26 ALT 1	CT5168-B - CT5177-B	ST1135
	UNDERPASS - AVENUE 26 ALT 2	CT5187-B - CT5189-B	
27	GRADE SEPARATION - AVENUE 25	CT5151-B - CT5162-B	ST1133 & ST1134
28	GRADE SEPARATION - AVENUE 23 1/2	CT5146-B - CT5149-B	ST1132
29	GRADE SEPARATION - ROAD 16	CT5142-B - CT5145-B	ST1131
30	GRADE SEPARATION - ROAD 15	CT5138-B - CT5141-B	ST1130
31	GRADE SEPARATION - ROAD 13	CT5132-B - CT5136-B	ST1129 & ST1137
32	GRADE SEPARATION - ROAD 10 ALT 1	CT5129-B - CT5131-B	ST1128
	GRADE SEPARATION - ROAD 10 ALONG EXIST ALT 2	CT5193-B - CT5195-B	ST1128
35	SANDY MUSH RD INTERCHANGE	CT7133-B - CT7136-B	ST1142
36	GRADE SEPARATION - ROBERTSON BLVD (SR 233) ALT 1	CT7129-B - CT7132-B	ST1143
	UNDERPASS - ROBERTSON BLVD (SR 233) ALT 2	CT7140-B - CT7142-B	

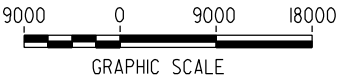
LOCATION NO.	SHEET TITLE	ROADWAY DWG NO.
66	PROPOSED WEST FRONTAGE ROAD	CR9172-B - CR9175-B
75	LOCAL ROAD - WEST FRONTAGE ROAD	CR9126-B - CR9127-B
76	LOCAL ROAD - SANDY MUSH ROAD	CR9152-B
	LOCAL ROAD - WEST FRONTAGE ROAD	CR9128-B - CR9129-B
77	LOCAL ROAD - ROAD 11	CR9150-B - CR9151-B
	LOCAL ROAD - CROSS ROAD	CR9153-B
78	SOUTH FRONTAGE ROAD	CR9159-B
	AVENUE 24	CR9160-B
79	SOUTH FRONTAGE ROAD	CR9161-B - CR9163-B
	LOCAL ROAD - FRONTAGE ROAD	CR9164-B
	LOCAL ROAD - FRONTAGE ROAD & AVE 24	CR9165-B
	LOCAL ROAD - FRONTAGE ROAD	CR9166-B
80	LOCAL ROAD - AVENUE 24 1/2	CR9154-B - CR9155-B
81	LOCAL ROAD - ROAD 12	CR9156-B
82	LOCAL ROAD - ROAD 12 1/2 & AVE 24 3/4	CR9157-B
	LOCAL ROAD - AVENUE 24 3/4	CR9158-B



LOCATION NUMBER LEGEND

- (X) - INDICATES GRADE SEPARATION
- (X) - INDICATES CALTRANS FACILITIES MODIFICATION
- (X) - INDICATES LOCAL ROAD RELOCATION

VICINITY MAP 1



1	12/28/11	RG			
REV	DATE	BY	CHK	APP	DESCRIPTION

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DRAWN BY A. TRINH
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 06/30/2011

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CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO  
UPPR/SR99 - (WC)

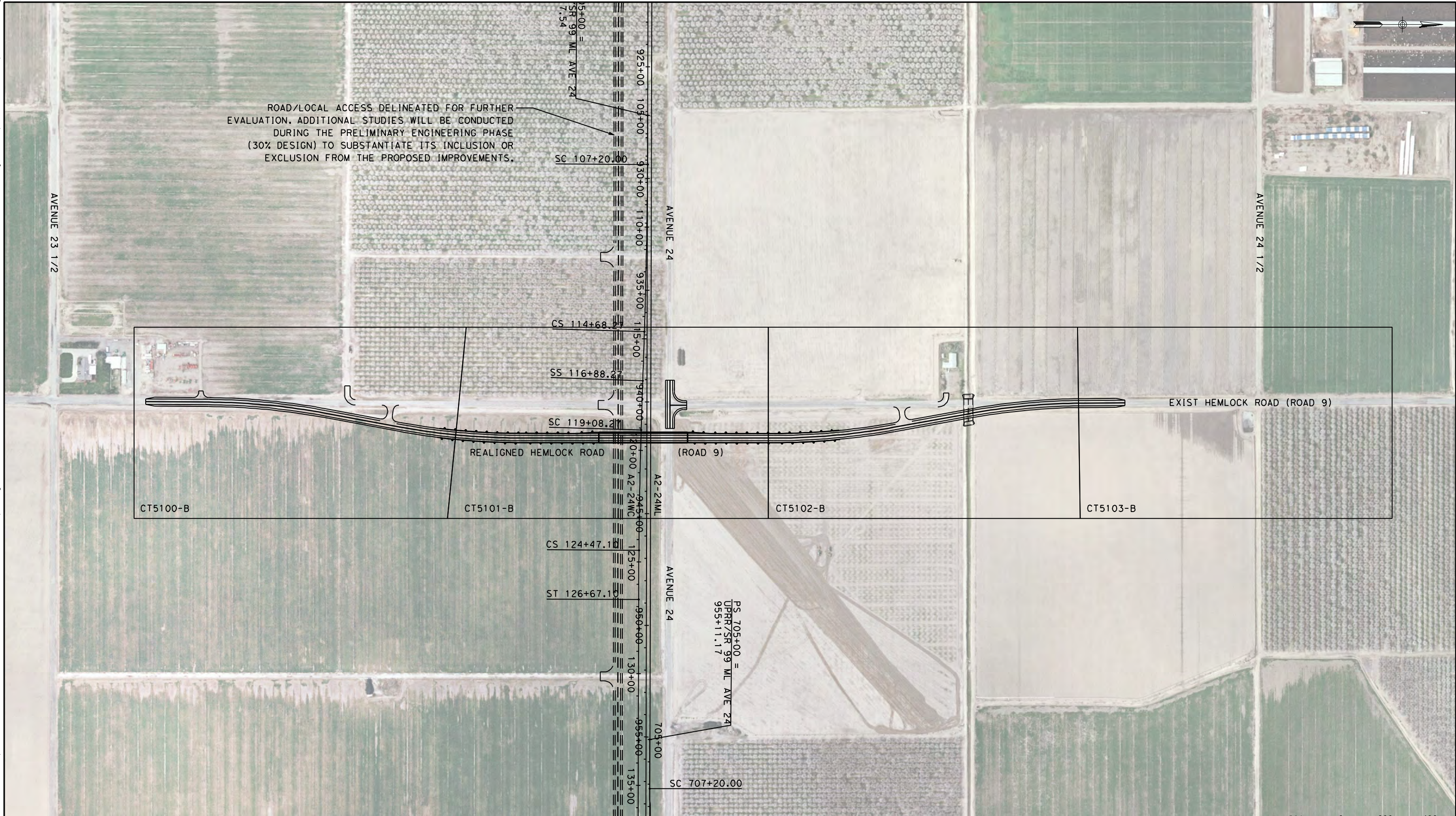
INDEX MAP  
SHEET 5 OF 5

CONTRACT NO. HSR06-007
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ReyesC1



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C. DELOS REYES  
CHECKED BY  
A. SILVER  
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**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**

UPRR/SR99 MAINLINE/WYE - (AVE 24/WC)  
GRADE SEPARATION - HEMLOCK RD (ROAD 9) ALT 1  
KEY MAP  
SHEET 1 OF 1

CONTRACT NO.  
HSR06-007

DRAWING NO.  
CB5100-B

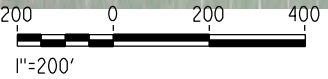
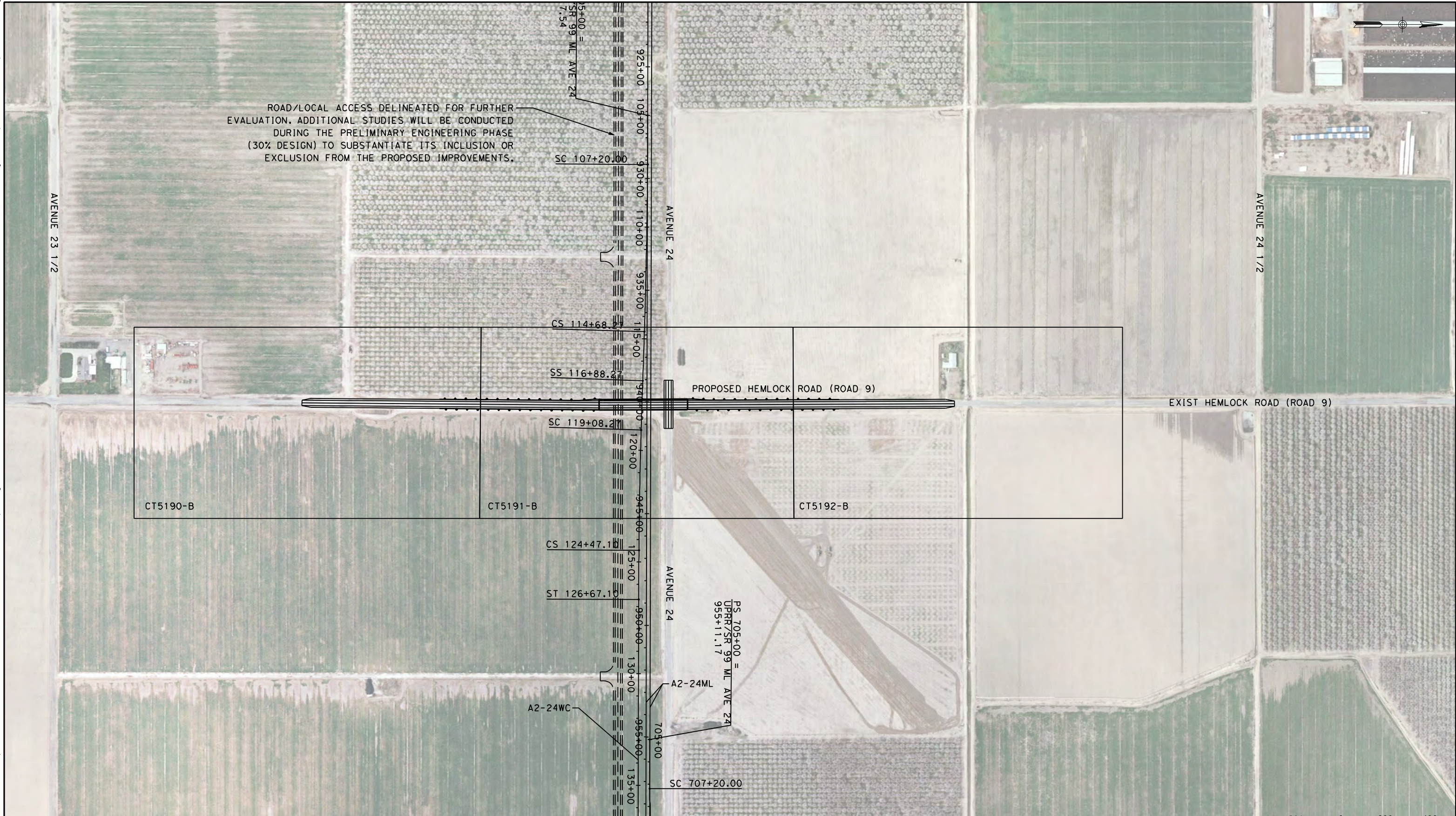
SCALE  
AS SHOWN

SHEET NO.  
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4/27/2011 6:09:15 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\key Map\CB5101-B.dgn

ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2MHILL**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**

UPRR/SR99 MAINLINE/WYE - (AVE 24)  
GRADE SEPARATION - ROAD 9 ALONG EXIST ALT 2  
KEY MAP  
SHEET 1 OF 1

CONTRACT NO.  
HSR06-007

DRAWING NO.  
CB5101-B

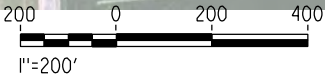
SCALE  
AS SHOWN

SHEET NO.  
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4/27/2011 6:10:02 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\key Map\CB5102-B.dgn

ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**

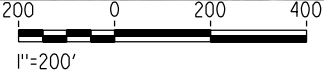
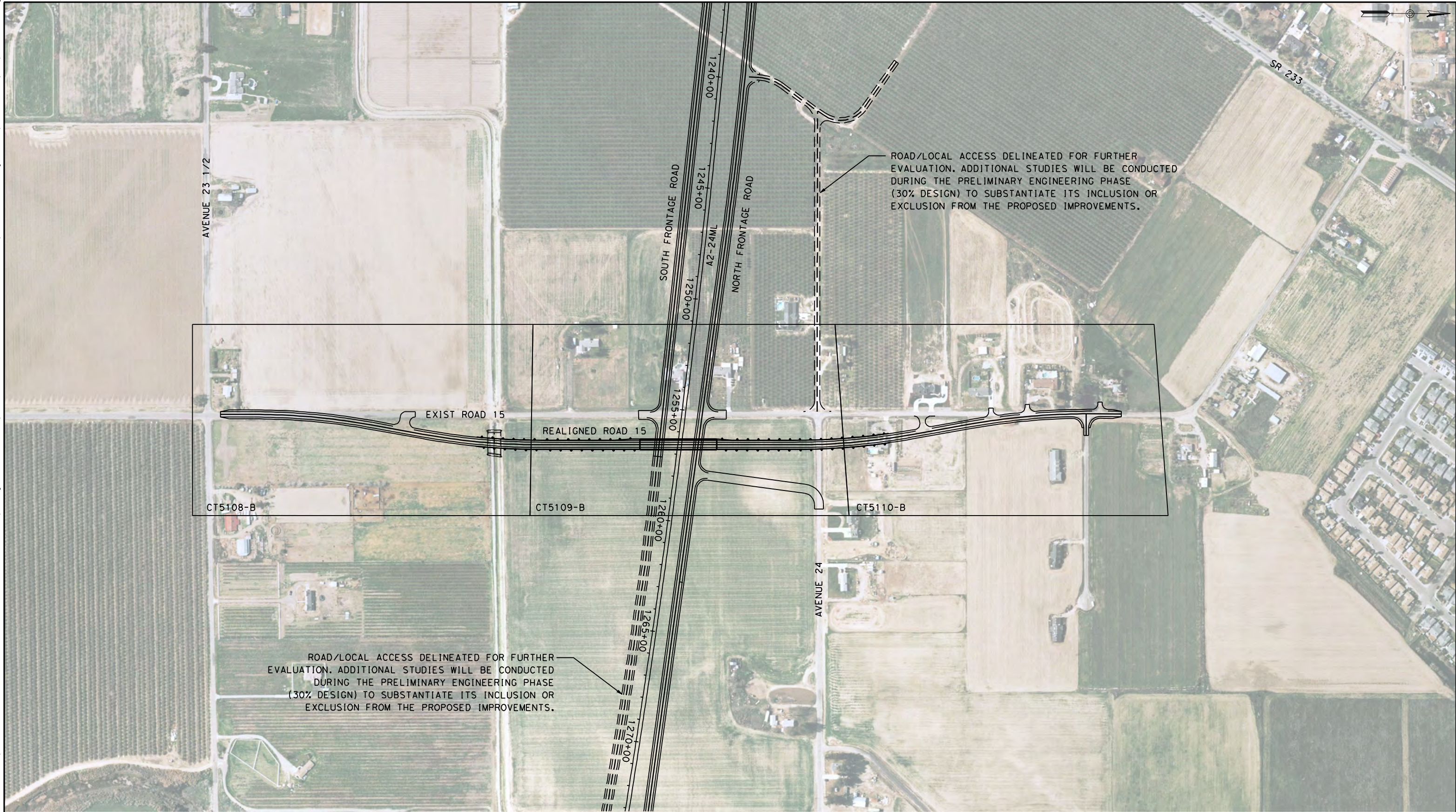


**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPRR/SR99 MAINLINE - (AVE 24)  
GRADE SEPARATION - ROAD 13  
KEY MAP  
SHEET 1 OF 1

CONTRACT NO. HSR06-007
DRAWING NO. CB5102-B
SCALE AS SHOWN
SHEET NO. ### OF ###



4/27/2011 6:10:37 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\key Map\CB5103-B.dgn  
ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
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2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE - (AVE 24)  
GRADE SEPARATION - ROAD 15  
KEY MAP  
SHEET 1 OF 1

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CB5103-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 6:11:11 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\key Map\CB5104-B.dgn

ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**

UPRR/SR99 MAINLINE - (AVE 24)  
GRADE SEPARATION - ROAD 16  
KEY MAP  
SHEET 1 OF 1

CONTRACT NO.  
HSR06-007

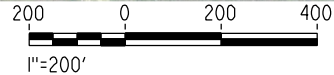
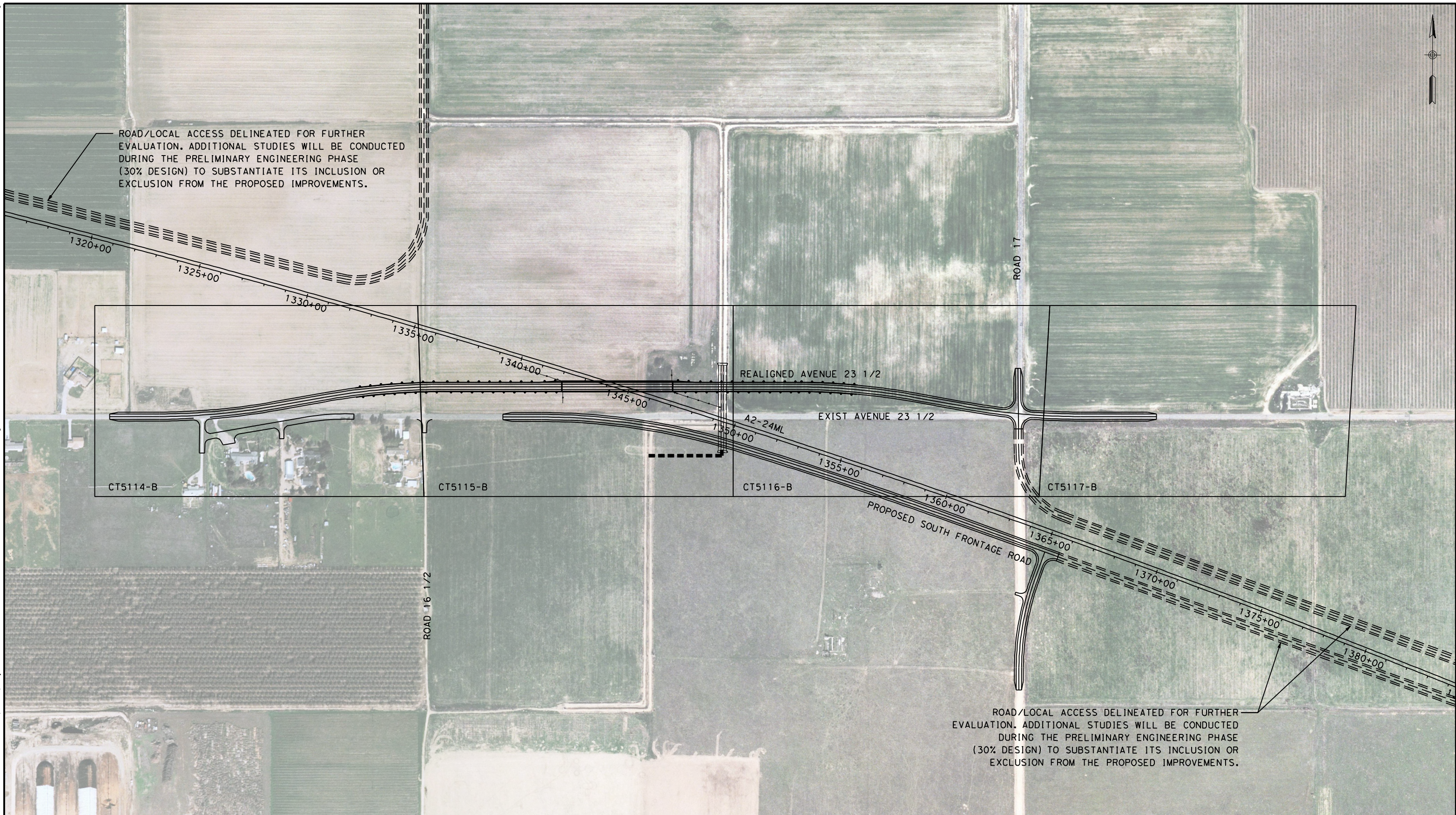
DRAWING NO.  
CB5104-B

SCALE  
AS SHOWN

SHEET NO.  
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USER=ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
06/30/2011

RECORD SET  
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SUBMITTAL

NOT FOR  
CONSTRUCTION



CALIFORNIA  
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO

UPRR/SR99 MAINLINE - (AVE 24)  
GRADE SEPARATION - AVENUE 23 1/2  
KEY MAP  
SHEET 1 OF 1

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CB5105-B  
SCALE  
AS SHOWN  
SHEET NO.  
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ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET**  
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Sacramento, CA 95811  
**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

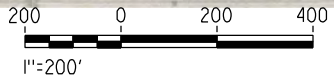
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**MERCED TO FRESNO**  
UPRR/SR99 WYE - (AVE 24)  
GRADE SEPARATION - AVENUE 25  
KEY MAP  
SHEET 1 OF 1

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CB5106-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



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ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPRR/SR99 WYE - (AVE 24)  
GRADE SEPARATION - AVENUE 26  
KEY MAP  
SHEET 1 OF 1

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CB5107-B  
SCALE  
AS SHOWN  
SHEET NO.  
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ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

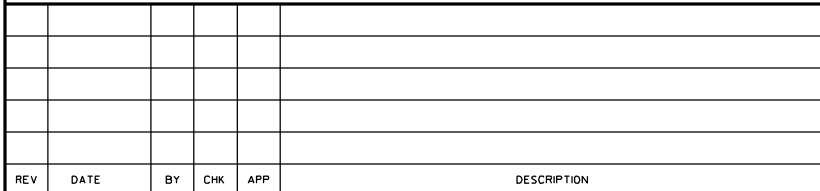
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 WYE - (AVE 24)  
GRADE SEPARATION - CROSS ROAD  
KEY MAP  
SHEET 1 OF 1

CONTRACT NO. HSR06-007
DRAWING NO. CB5108-B
SCALE AS SHOWN
SHEET NO. ### OF ###





CONTRACT NO.	HSR06-007
DRAWING NO.	CB5109-B
SCALE	AS SHOWN
SHEET NO.	### OF ###



4/27/2011 6:15:19 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\key Map\CB5110-B.dgn

ReyesC1

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

RECORD SET  
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SUBMITTAL

NOT FOR  
CONSTRUCTION



CALIFORNIA  
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO

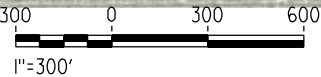
UPRR/SR99 MAINLINE/WYE - (WC)  
GRADE SEPARATION - ROAD 10 ALONG EXIST ALT 2  
KEY MAP  
SHEET 1 OF 1

CONTRACT NO. HSR06-007
DRAWING NO. CB5110-B
SCALE AS SHOWN
SHEET NO. ### OF ###





1/5/2012 1:29:21 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\key Map\CB5111-B.dgn  
ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION
1	12/28/11	RG			

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
06/30/2011

RECORD SET  
15% DESIGN  
SUBMITTAL  
  
NOT FOR  
CONSTRUCTION

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**

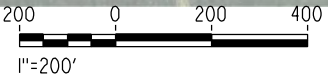
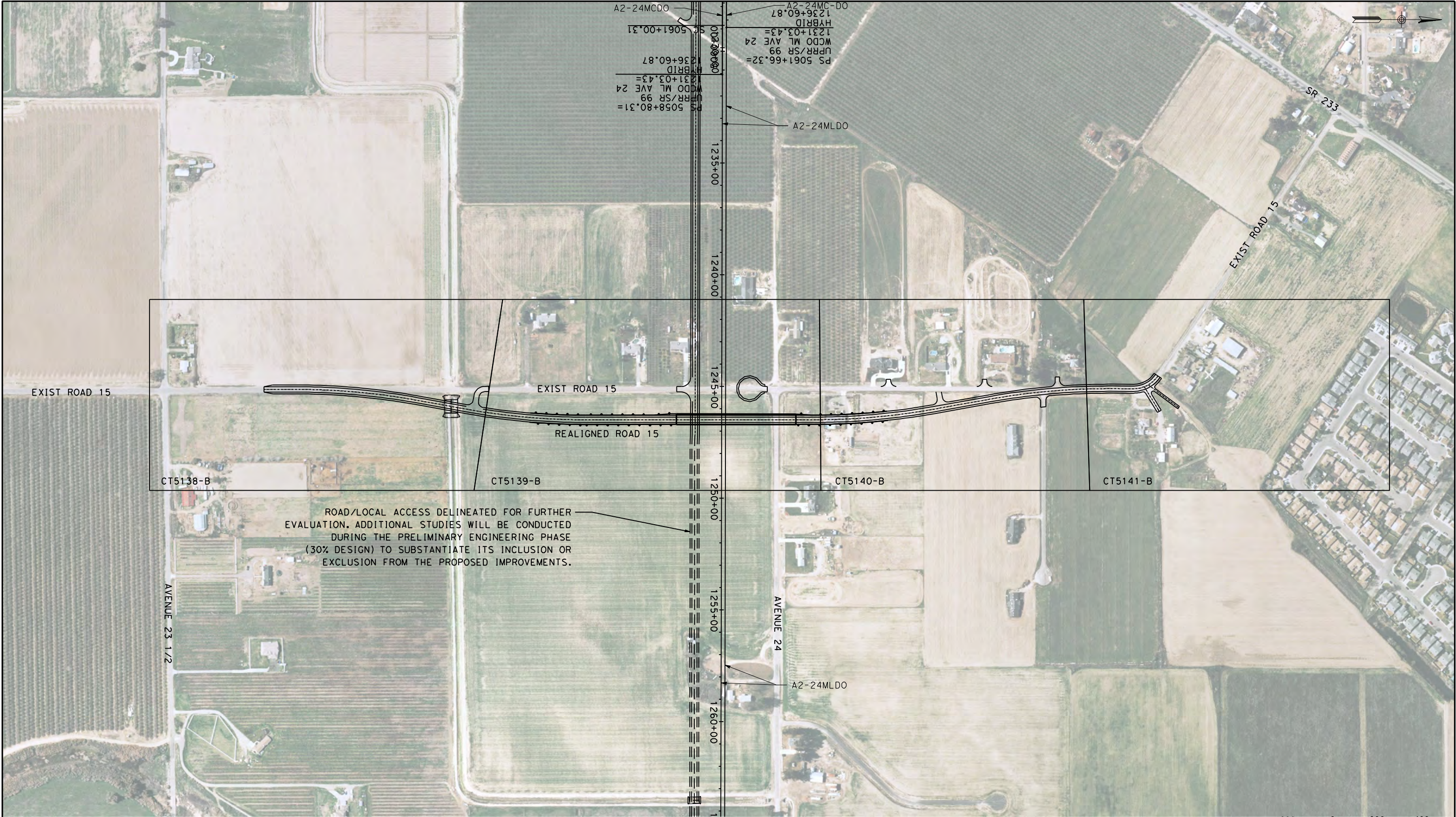


**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPRR/SR99 MAINLINE/MERCED DO - (WC)  
GRADE SEPARATION - ROAD 13  
KEY MAP  
SHEET 1 OF 1

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CB5111-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/28/2011 4:41:26 PM P:\60022962\Task 02\_Merced-Fresno\cadd\Civil\Sheet\Package 2 - Ave 24 Wye & W. Chowchilla\Volume 1B - Ave 24 Wye-W.Chowchilla Grade Separation\Key Map\CB5112-B.dgn  
oyeled



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



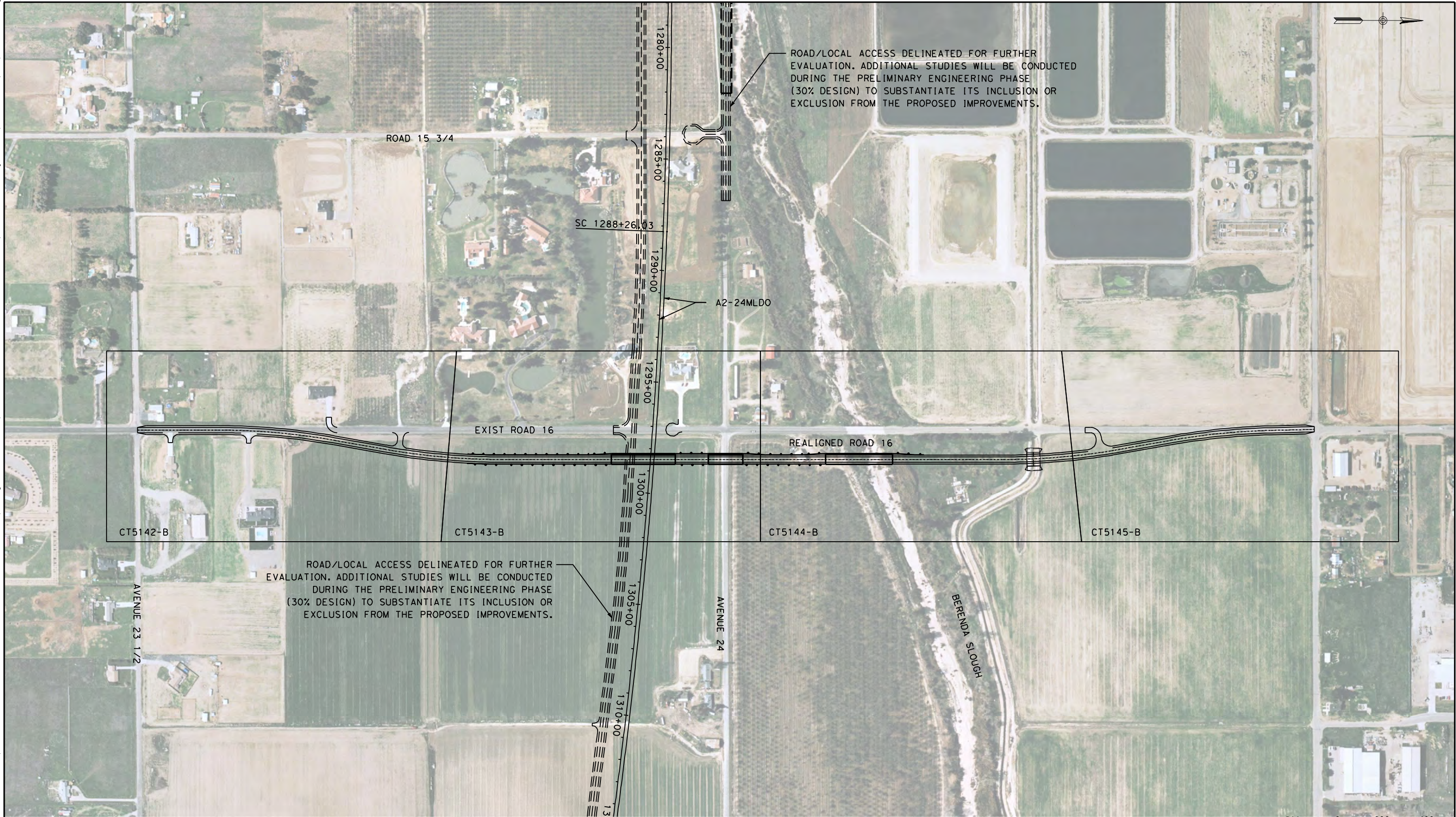
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**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE DO/MERCED DO - (WC)  
GRADE SEPARATION - ROAD 15  
KEY MAP  
SHEET 1 OF 1

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CB5112-B  
SCALE  
AS SHOWN  
SHEET NO.  
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ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

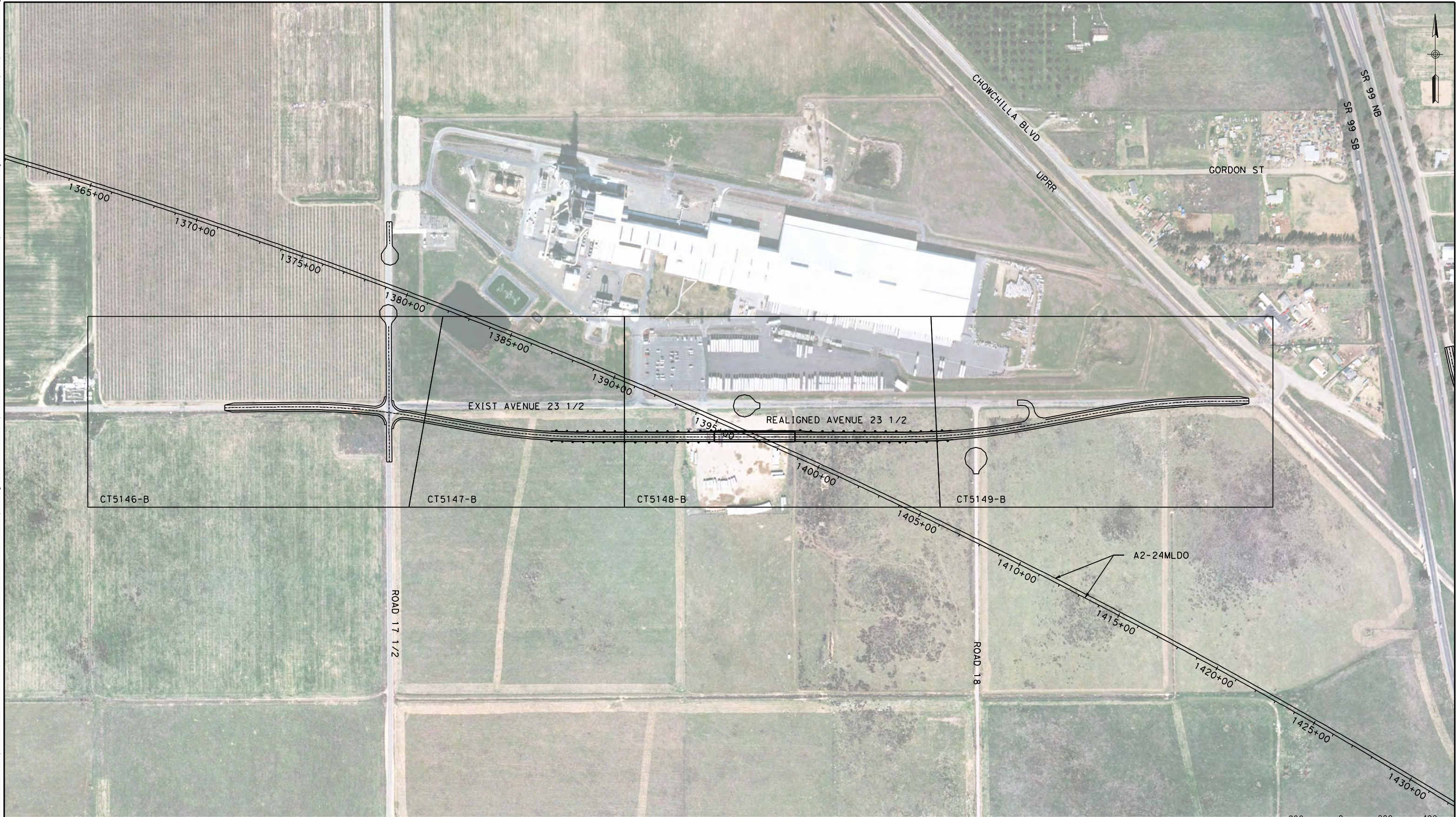
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**

UPRR/SR99 MAINLINE DO - (WC)  
GRADE SEPARATION - ROAD 16  
KEY MAP  
SHEET 1 OF 1

CONTRACT NO. HSR06-007
DRAWING NO. CB5113-B
SCALE AS SHOWN
SHEET NO. ### OF ###



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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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SUBMITTAL

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CONSTRUCTION

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Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

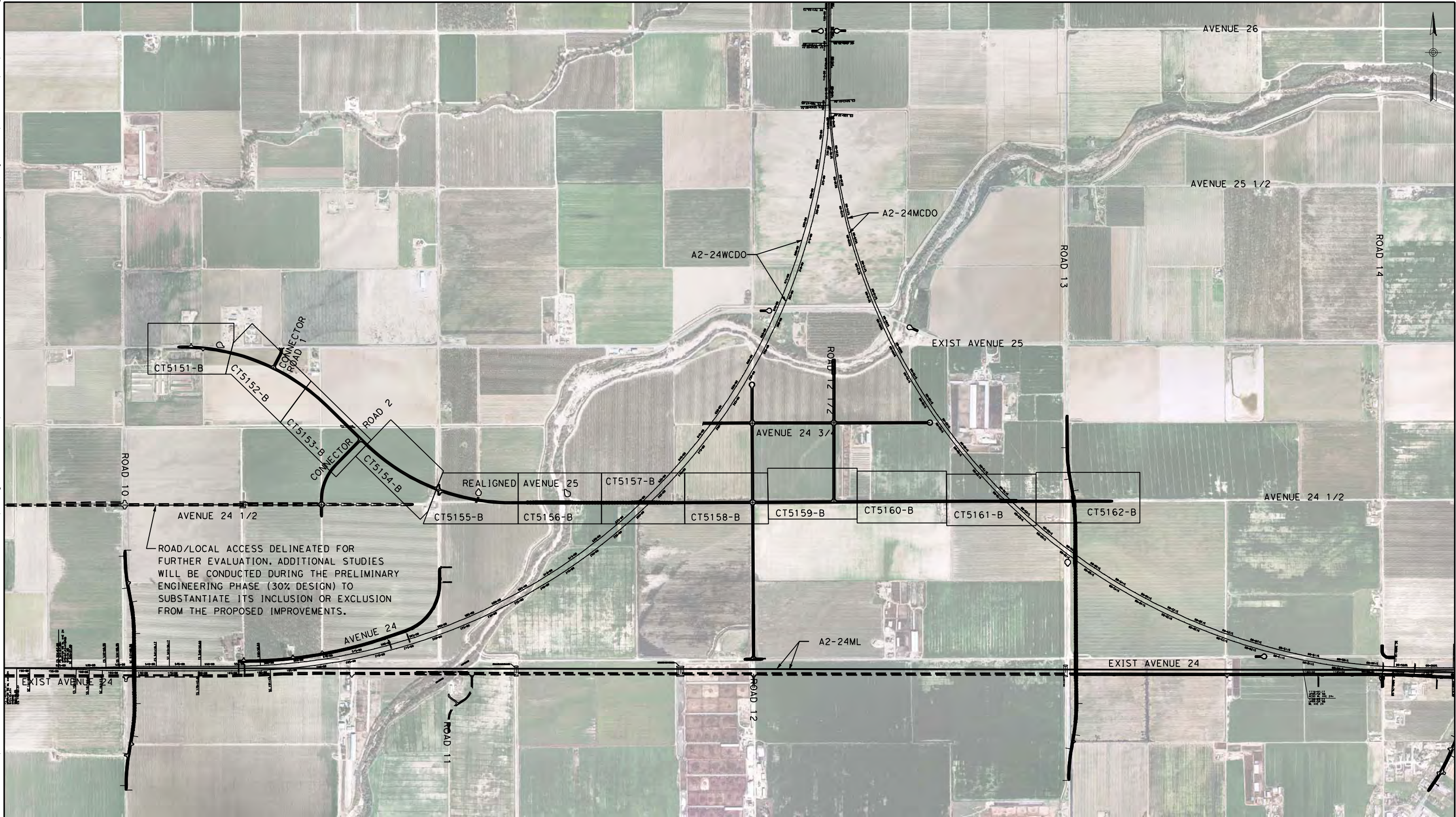
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**

UPRR/SR99 MAINLINE DO - (WC)  
GRADE SEPARATION - AVENUE 23 1/2  
KEY MAP  
SHEET 1 OF 1

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CB5114-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



1/5/2012 1:30:10 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\key Map\CB5115-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION
1	12/28/11	RG			

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
06/30/2011

RECORD SET  
15% DESIGN  
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NOT FOR  
CONSTRUCTION

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Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPRR/SR99 WYE/MERCED DO - (WC)  
GRADE SEPARATION - AVENUE 25  
KEY MAP  
SHEET 1 OF 1

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CB5115-B  
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SHEET NO.  
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ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

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2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



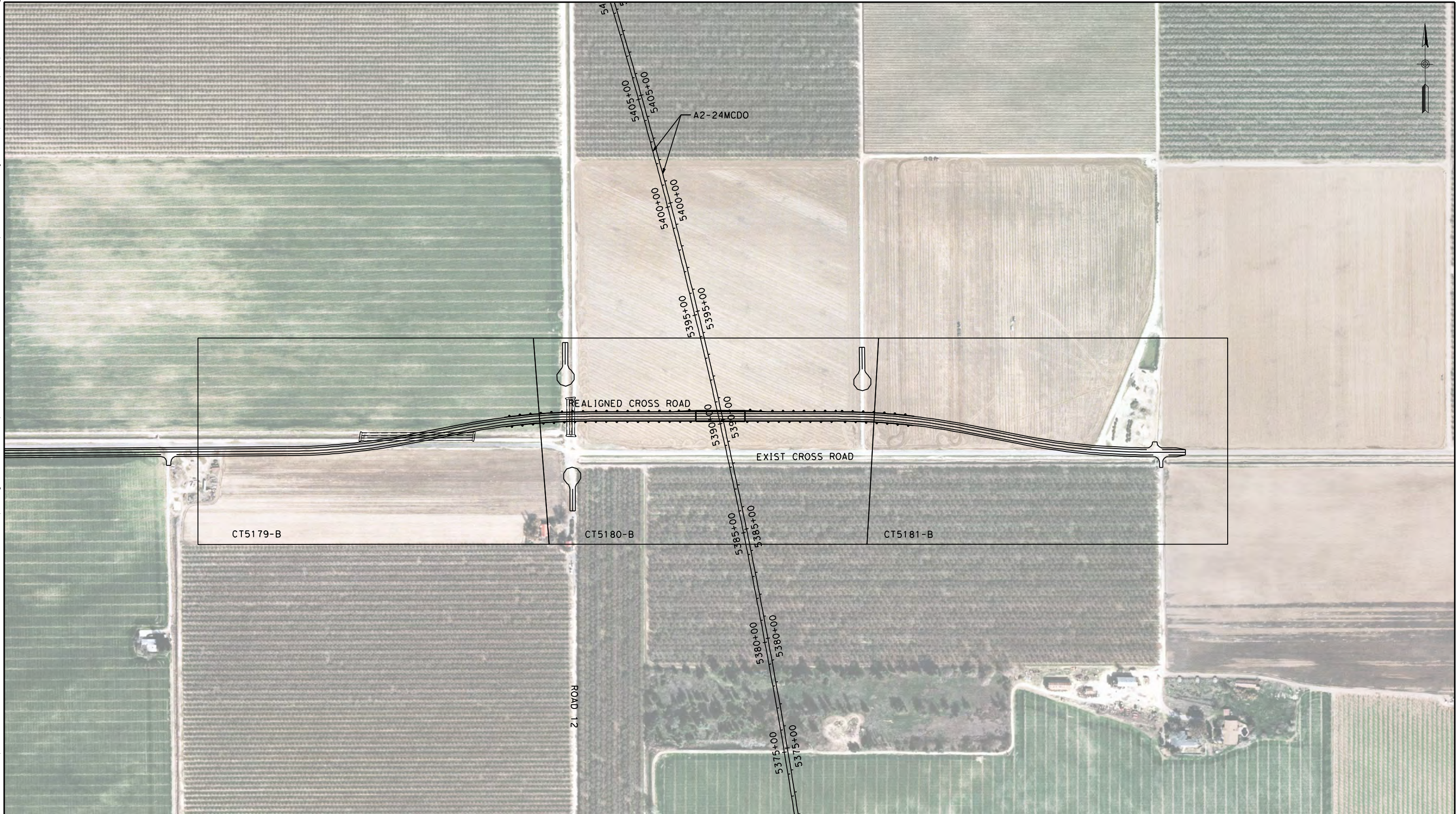
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 WYE/MERCED DO - (WC)  
GRADE SEPARATION - AVENUE 26 ALT 1  
KEY MAP  
SHEET 1 OF 1

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CB5116-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



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ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

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CONSTRUCTION**

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Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**

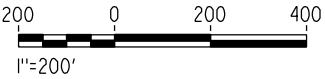
UPRR/SR99 MERCED DO - (WC)  
GRADE SEPARATION - CROSS ROAD  
KEY MAP  
SHEET 1 OF 1

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CB5117-B  
SCALE  
AS SHOWN  
SHEET NO.  
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ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

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**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**

UPRR/SR99 WYE/MERCED DO - (WC)  
UNDERPASS - AVENUE 26 ALT 2  
KEY MAP  
SHEET 1 OF 1

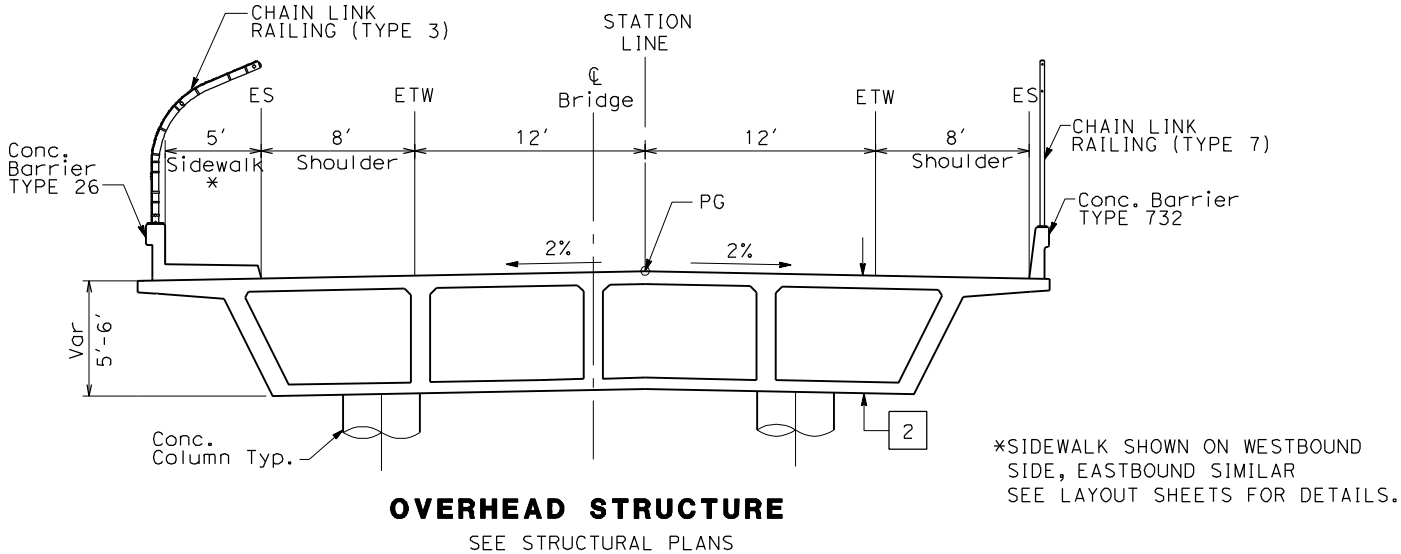
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DRAWING NO. CB5118-B
SCALE AS SHOWN
SHEET NO. ### OF ###



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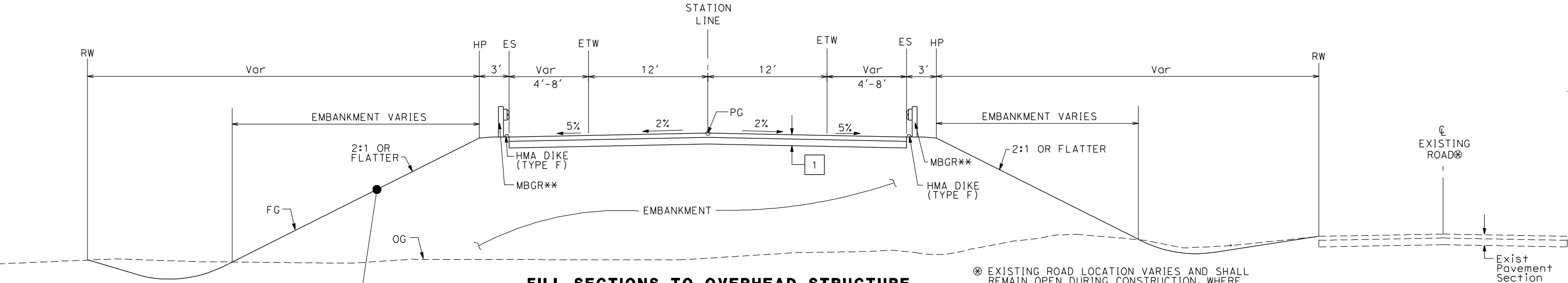
NOTES:

1. DIMENSIONS OF EXISTING PAVEMENT WIDTHS ARE BASED ON MEASUREMENTS MADE IN THE FIELD AND ARE APPROXIMATE.
2. PAVEMENT SECTIONS ARE TO BE DETERMINED. GEOTECHNICAL INVESTIGATIONS WILL BE CONDUCTED IN A SUBSEQUENT PHASE TO DETERMINE STRUCTURAL SECTIONS FOR EACH CROSSING.
3. SPACING OF BENCHES ON PROPOSED FILL SECTIONS ARE TO BE DETERMINED.
4. RIGHT-OF-WAY (R/W) WIDTH IS FOR INFORMATION ONLY. EXACT WIDTH TO BE DETERMINED IN COORDINATION WITH AFFECTED AGENCY.

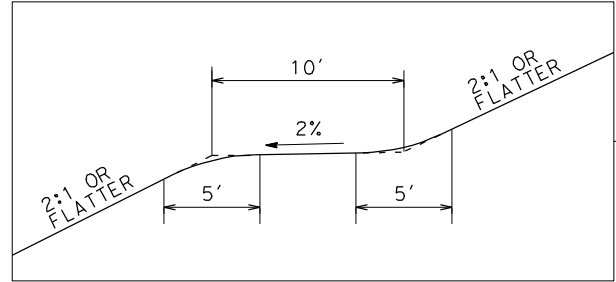


STRUCTURAL SECTIONS:

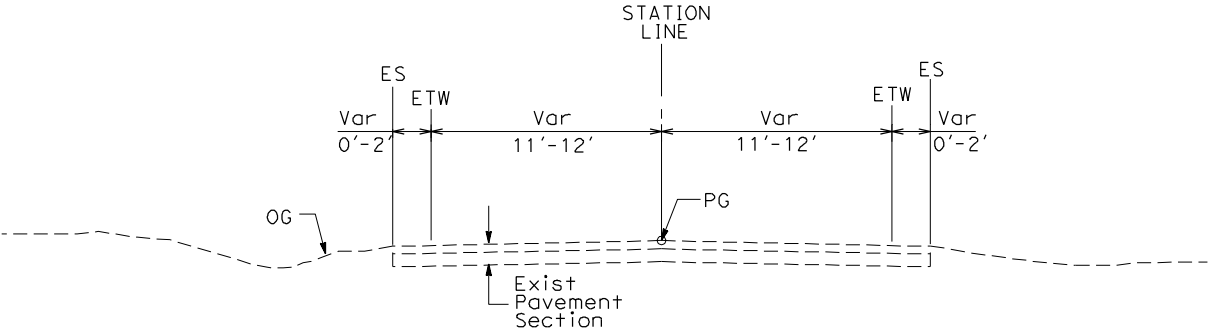
- 1 HMA TYPE A AB CLASS 2
- 2 CAST IN PLACE / PRESTRESSED BOX GIRDER (6' STRUCTURE DEPTH)



FILL SECTIONS TO OVERHEAD STRUCTURE  
WEST SIDE SHOWN (EAST SIDE SIMILAR)



BENCHING DETAIL



EXISTING LOCAL ROAD  
WEST SIDE SHOWN (EAST SIDE SIMILAR)  
SEE LAYOUT SHEETS FOR ACTUAL ROADWAY WIDTHS AT EACH CROSSING

TYPICAL CROSS SECTIONS ON THIS SHEET APPLY TO THE FOLLOWING ROADWAYS FOR THE ALIGNMENT A2, AVE 24 WYE OPTION & WEST CHOWCHILLA OPTION:

NO.	STREET NAME
1	ROAD 9 (HEMLOCK RD)
2	ROAD 10
3	ROAD 13
4	ROAD 15
5	ROAD 16
6	AVENUE 23-1/2
7	AVENUE 25
8	AVENUE 26
9	CROSS RD

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY K. OAKS
DRAWN BY K. OAKS
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

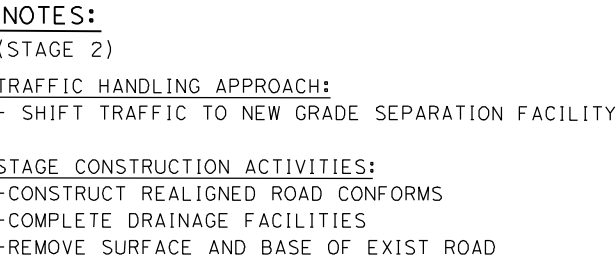
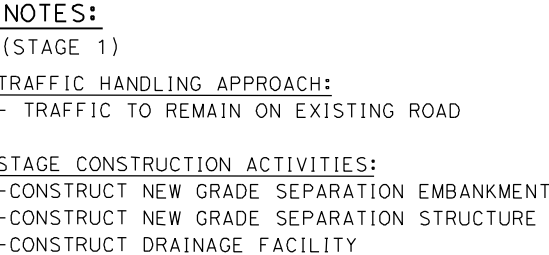
RECORD SET  
15% DESIGN  
SUBMITTAL  
  
NOT FOR  
CONSTRUCTION





**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**






**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPRR/SR99 - (AVE 24)  
GRADE SEPARATIONS  
TYPICAL CROSS SECTIONS  
SHEET 1 OF 1

CONTRACT NO. HSR06-007
DRAWING NO. CT5090-B
SCALE NTS
SHEET NO. #### OF ###

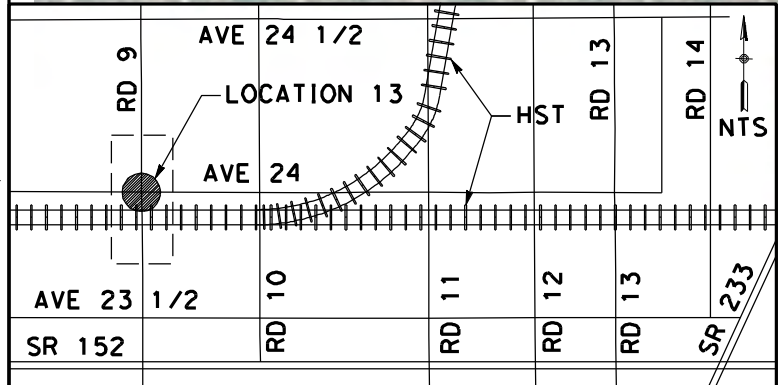


	CRASH CUSHION ARRAY (TYPE U11)
	TEMPORARY BARRIER (TYPE K)
	DIRECTION OF TRAVEL
	REMOVE BASE AND SURFACING (EXIST ROAD)

					DESIGNED BY S. WONG	<b>RECORD SET</b> <b>15% DESIGN</b> <b>SUBMITTAL</b>  <b>NOT FOR</b> <b>CONSTRUCTION</b>	 Technical Services, Inc. 2020 L Street, Suite 300 Sacramento, CA 95811  	 <b>CALIFORNIA</b> HIGH-SPEED RAIL AUTHORITY	<b>CALIFORNIA HIGH-SPEED TRAIN PROJECT</b> <b>MERCED TO FRESNO</b> UPRR/SR99 - (AVE 24/WC)	CONTRACT NO. HSR06-007
					DRAWN BY F. DEMARCO					DRAWING NO. CT5091-B
					CHECKED BY A. SILVER					SCALE NO SCALE
					IN CHARGE A. BOONE					SHEET NO. ### OF ###
REV	DATE	BY	CHK	APP	DESCRIPTION					



4/27/2011 6:20:41 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\layout\CT5100-B.dgn



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6100-B THROUGH CT6103-B

**CURVE DATA**

No.	R	$\Delta$	T	L	V
1	3000.00	10°00'00"	262.47	523.60	45 MPH
2	3000.00	10°26'57"	274.32	547.12	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE/WYE - (AVE 24/WC)  
GRADE SEPARATION - HEMLOCK RD (ROAD 9) ALT 1  
LAYOUT  
SHEET 1 OF 4

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5100-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



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DESIGNED BY	D. AYELE
DRAWN BY	C. DELOS REYES
CHECKED BY	A. SILVER
IN CHARGE	A. BOONE
DATE	04/29/2011

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**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**

HS

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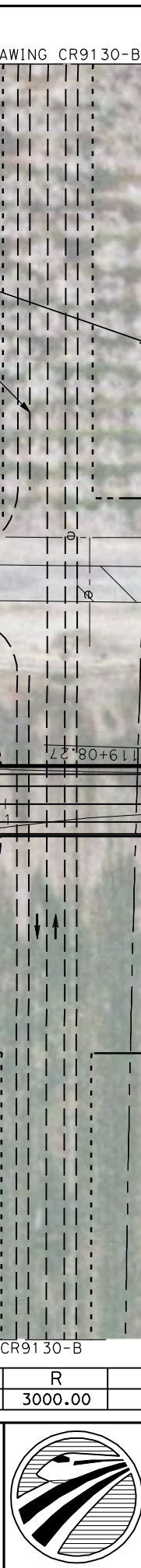
ANT

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11.02 MBGR

SE

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2MHILL**



**CURVE DATA**

$\Delta$	T
10°26'57"	274.32

**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

T TRACK  
 4WC(SEE DRAWING T2320-A)  
 ST TRACKS  
 4ML(SEE DRAWING T2301-A)

REMOVE BASE & SURFACING  
 R=50'

(40) (40) (40) (40)  
 EXIST HEMLOCK ROAD TO SERVE AS POTENTIAL PRIVATE PROPERTY ACCESS  
 MBGR  
 LIMITS OF DITCH  
 TOE OF FILL  
 R=50'  
 REALIGNED HEMLOCK ROAD (ROAD 9)  
 STA 124+39.00 END BRIDGE  
 STA 124+39.00 BEGIN MBGR  
 TOE OF FILL  
 LIMITS OF DITCH  
 LIMIT OF IMPACT  
 PROPOSED ROAD 9 OVERHEAD

FOR ROADWAY PROFILE, SEE DRAWINGS CT6100-B THROUGH CT6103-B

V
45 MPH

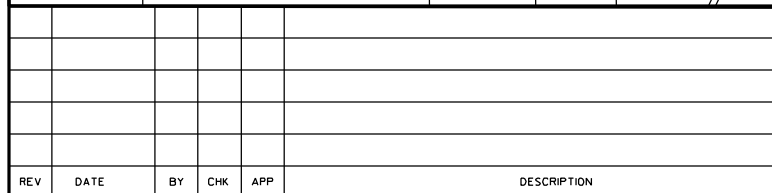
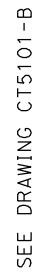
50 0 50 100  
 1"=50'

**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
 MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/WYE - (AVE 24/WC)  
 GRADE SEPARATION - HEMLOCK RD (ROAD 9) ALT 1  
 LAYOUT  
 SHEET 2 OF 4

MATCH LINE STA 128+00  
 SEE DRAWING CT5102-B

CONTRACT NO.	HSR06-007
DRAWING NO.	CT5101-B
SCALE	AS SHOWN
SHEET NO.	### OF ###





1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6100-B THROUGH CT6103-B

No.	R	$\Delta$	T	L	V
(3)	3000.00	10° 16' 57"	269.92	538.38	45 MPH
(4)	3000.00	10° 00' 00"	262.47	523.60	45 MPH



**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2MHILL**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE/WYE - (AVE 24/WC)  
GRADE SEPARATION - HEMLOCK RD (ROAD 9) ALT 1  
LAYOUT  
SHEET 3 OF 4

CONTRACT NO.  
HSR06-007

DRAWING NO.  
CT5102-B

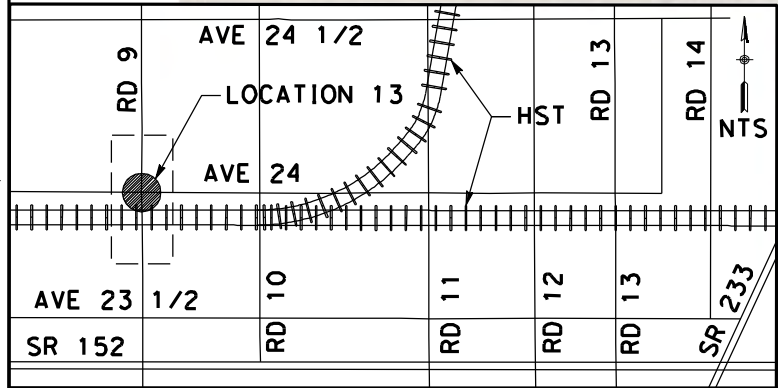
SCALE  
AS SHOWN

SHEET NO.  
### OF ###



4/27/2011 6:21:15 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\layout\CT5103-B.dgn

ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

RECORD SET  
15% DESIGN  
SUBMITTAL  
  
NOT FOR  
CONSTRUCTION

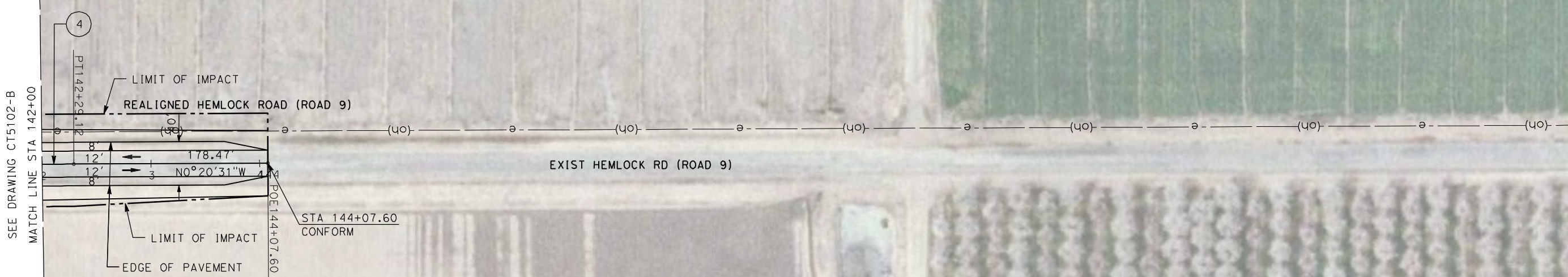
**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPRR/SR99 MAINLINE/WYE - (AVE 24/WC)  
GRADE SEPARATION - HEMLOCK RD (ROAD 9) ALT 1  
LAYOUT  
SHEET 4 OF 4

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5103-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6100-B THROUGH CT6103-B

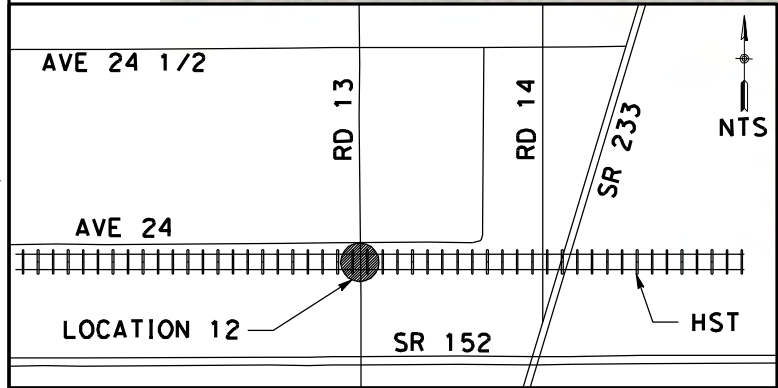
CURVE DATA					
No.	R	$\Delta$	T	L	V
(4)	3000.00	10°00'00"	262.47	523.60	45 MPH





4/27/2011 6:21:23 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\layout\CT5104-B.dgn

ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

RECORD SET  
15% DESIGN  
SUBMITTAL

NOT FOR  
CONSTRUCTION

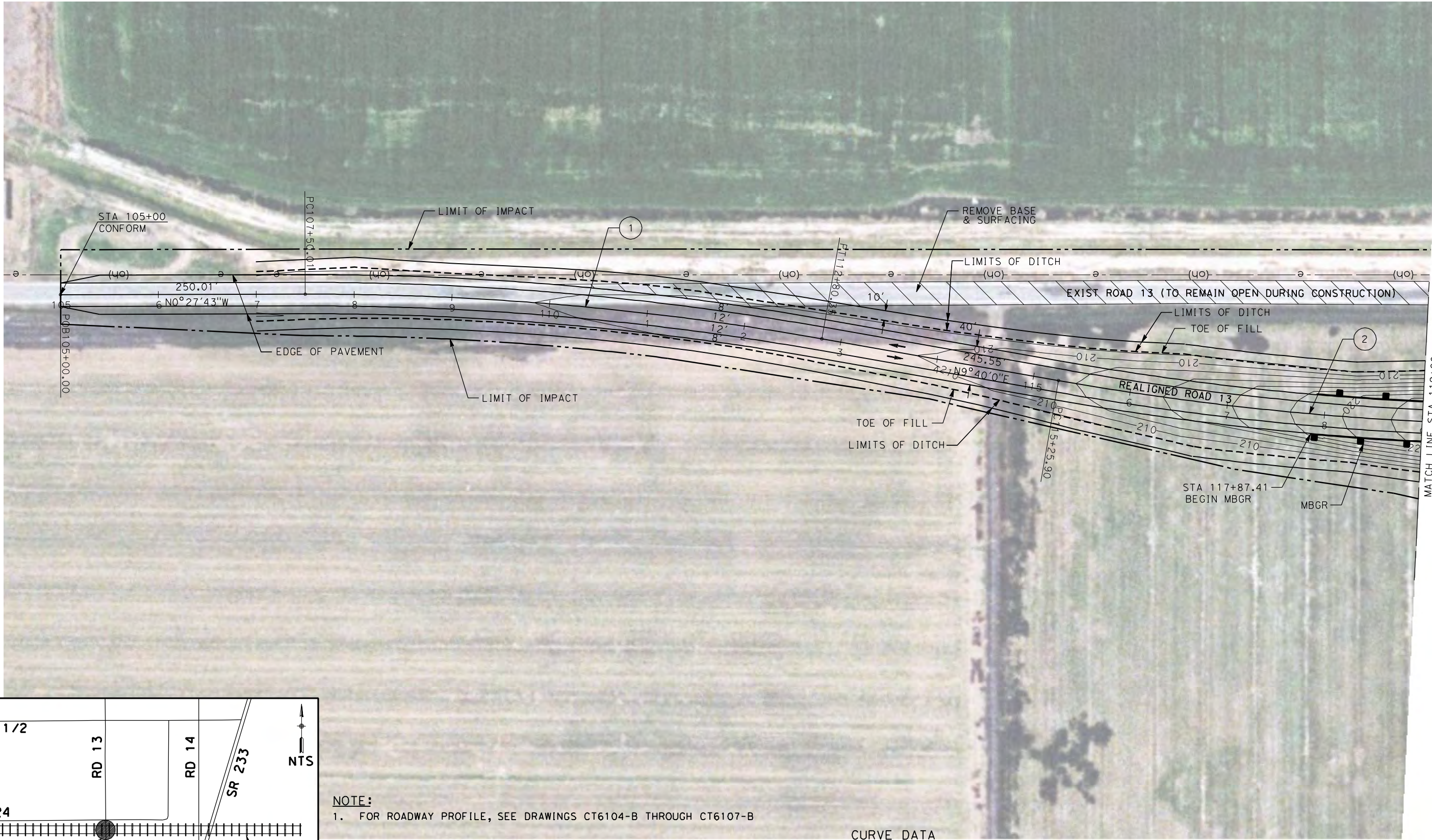


CALIFORNIA  
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO

UPRR/SR99 MAINLINE - (AVE 24)  
GRADE SEPARATION - ROAD 13  
LAYOUT  
SHEET 1 OF 4

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5104-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6104-B THROUGH CT6107-B

CURVE DATA

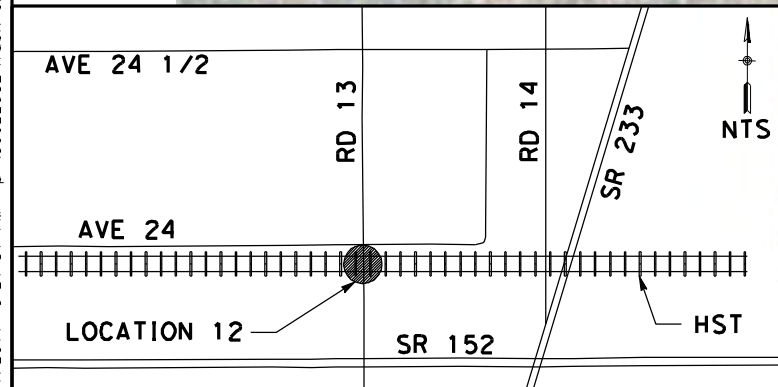
No.	R	Δ	T	L	V
①	3000.00	10°07'43"	265.86	530.34	45 MPH
②	3000.00	10°00'07"	262.52	532.71	45 MPH





4/27/2011 6:21:37 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\layout\CT5105-B.dgn

ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

RECORD SET  
15% DESIGN  
SUBMITTAL  
  
NOT FOR  
CONSTRUCTION

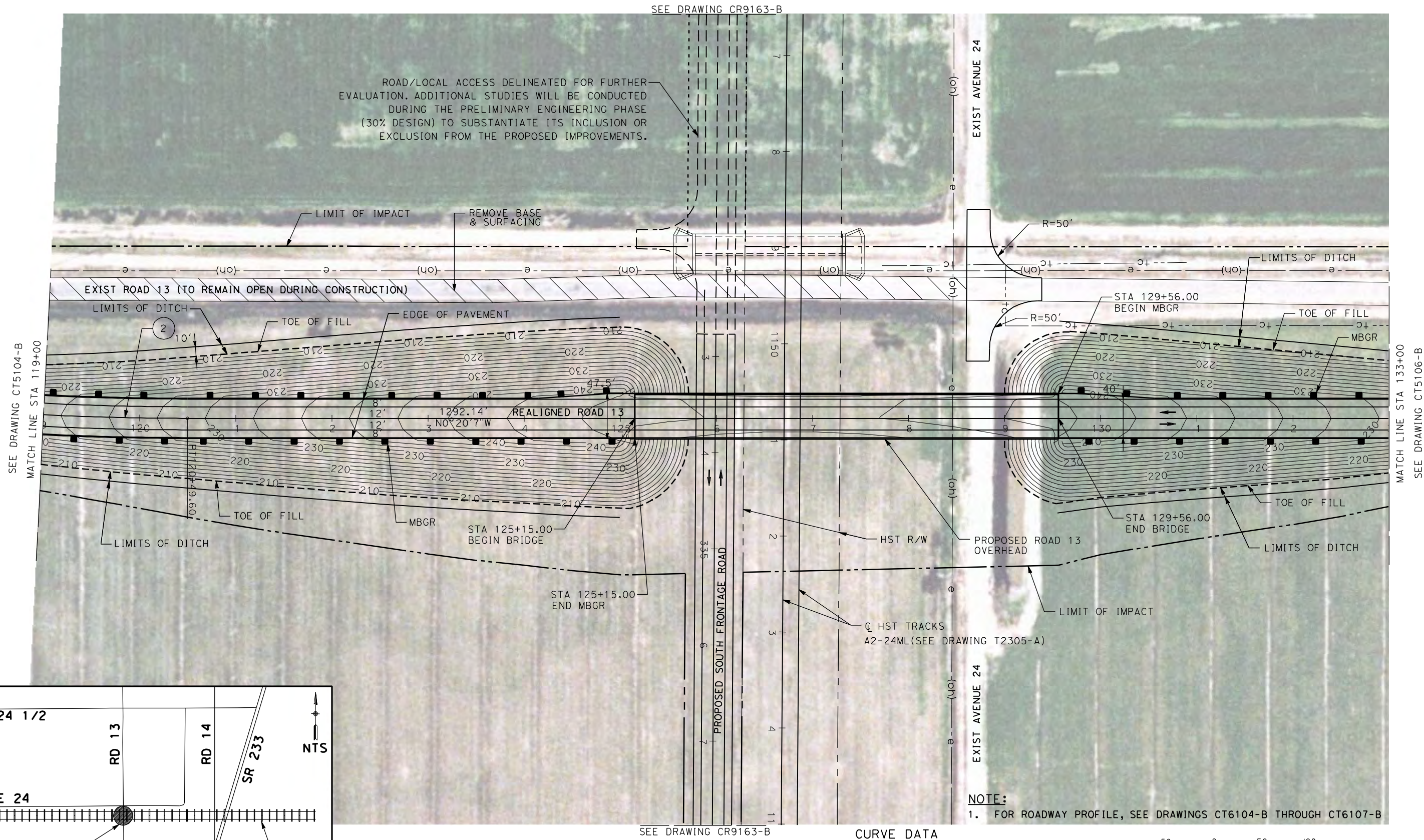
**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

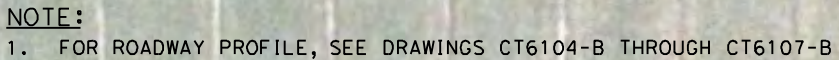
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPRR/SR99 MAINLINE - (AVE 24)  
GRADE SEPARATION - ROAD 13  
LAYOUT  
SHEET 2 OF 4

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5105-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



No.	R	$\Delta$	T	L	V
(2)	3000.00	10°00'07"	262.52	532.71	45 MPH



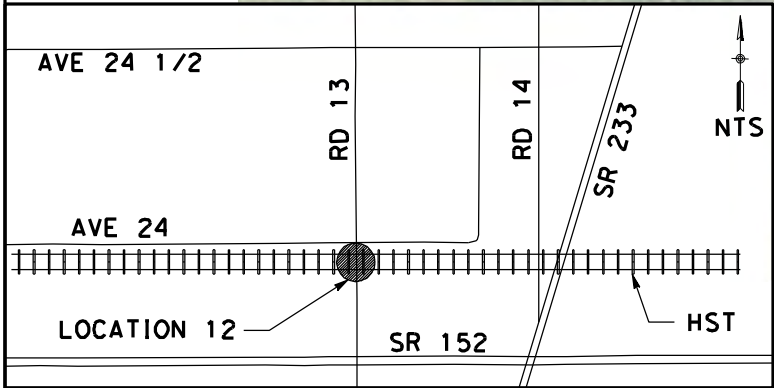
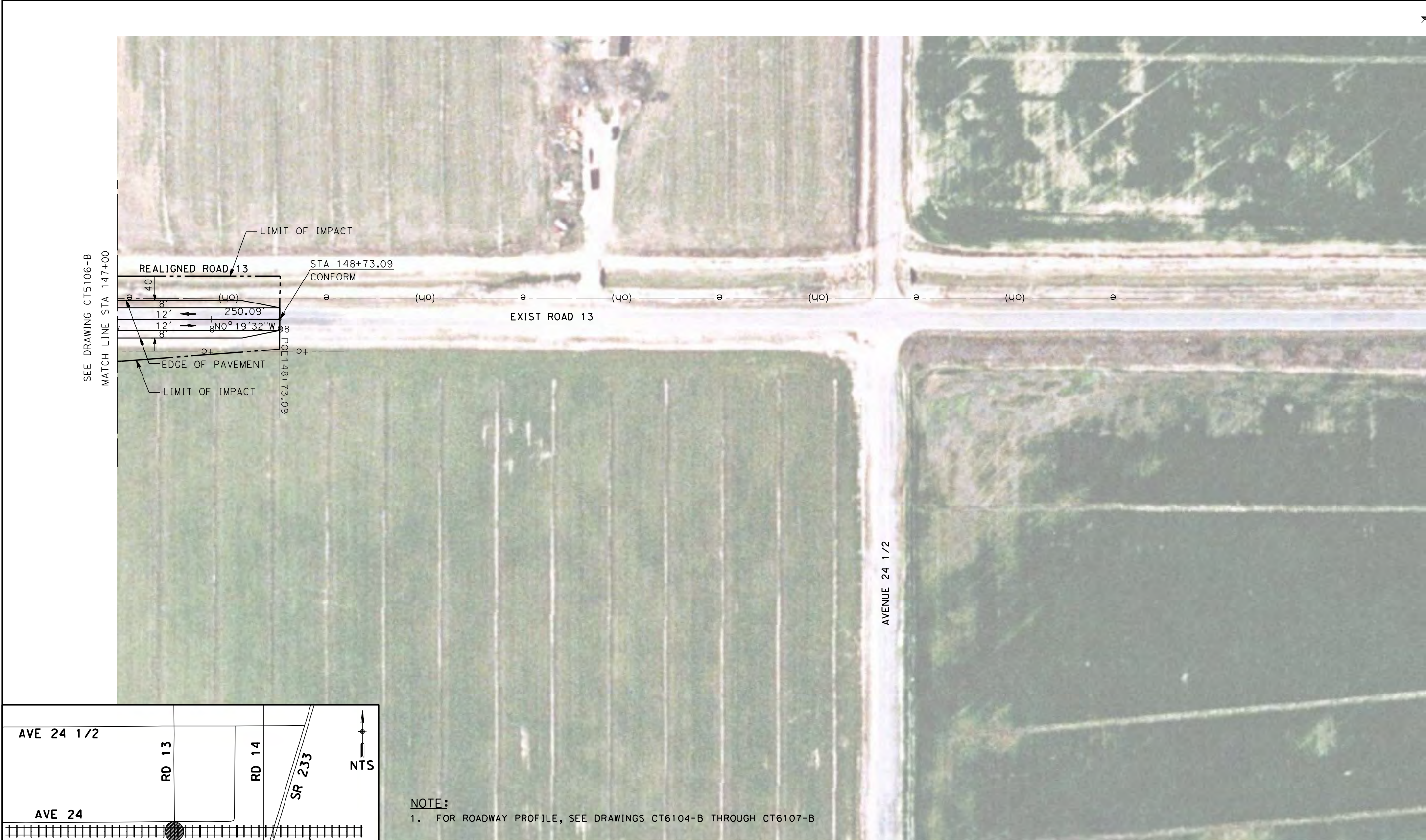


CONTRACT NO.	HSR06-007
DRAWING NO.	CT5106-B
SCALE	AS SHOWN
SHEET NO.	### OF ###



4/27/2011 6:21:55 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\layout\CT5107-B.dgn

ReyesC1



**NOTE:**

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6104-B THROUGH CT6107-B

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**



**CALIFORNIA  
HIGH-SPEED RAIL AUTHORITY**

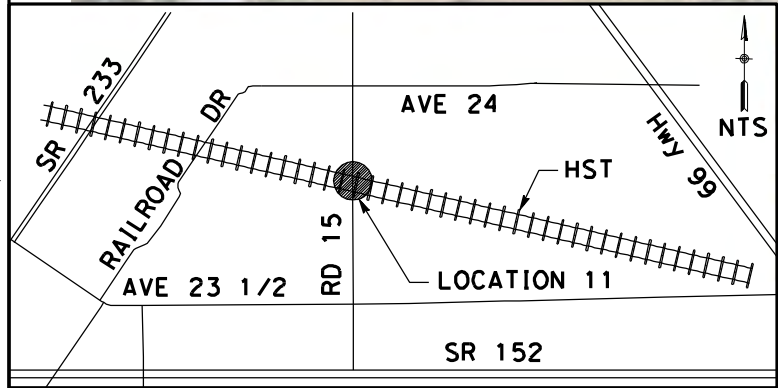
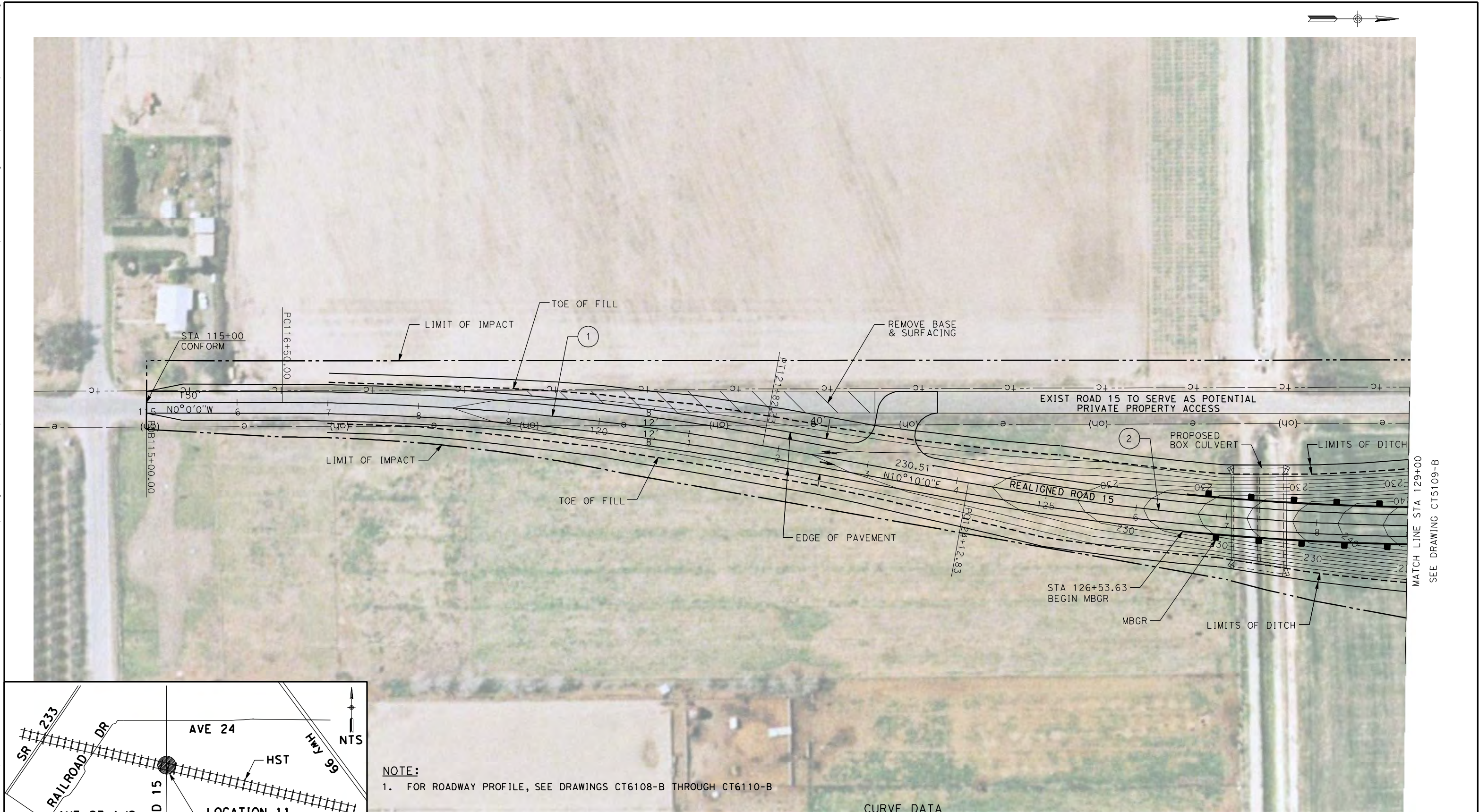
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**

UPRR/SR99 MAINLINE - (AVE 24)  
GRADE SEPARATION - ROAD 13  
LAYOUT  
SHEET 4 OF 4

CONTRACT NO. HSR06-007
DRAWING NO. CT5107-B
SCALE AS SHOWN
SHEET NO. ### OF ###

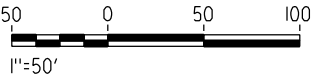


4/27/2011 6:22:03 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\layout\CT5108-B.dgn



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6108-B THROUGH CT6110-B

CURVE DATA					
No.	R	$\Delta$	T	L	V
①	3000.00	10°10'00"	266.86	532.33	45 MPH
②	3000.00	10°13'57"	268.60	535.78	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



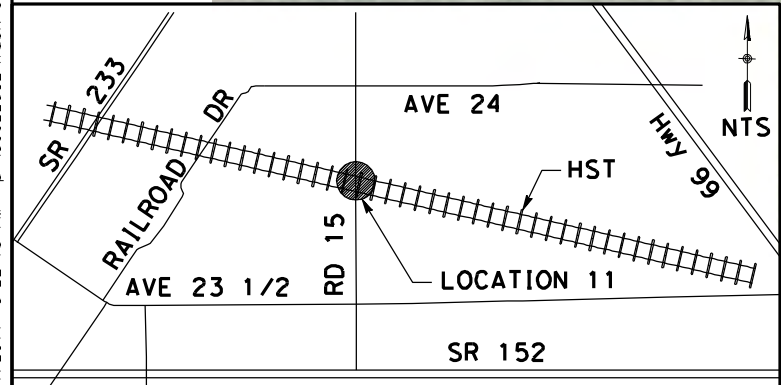
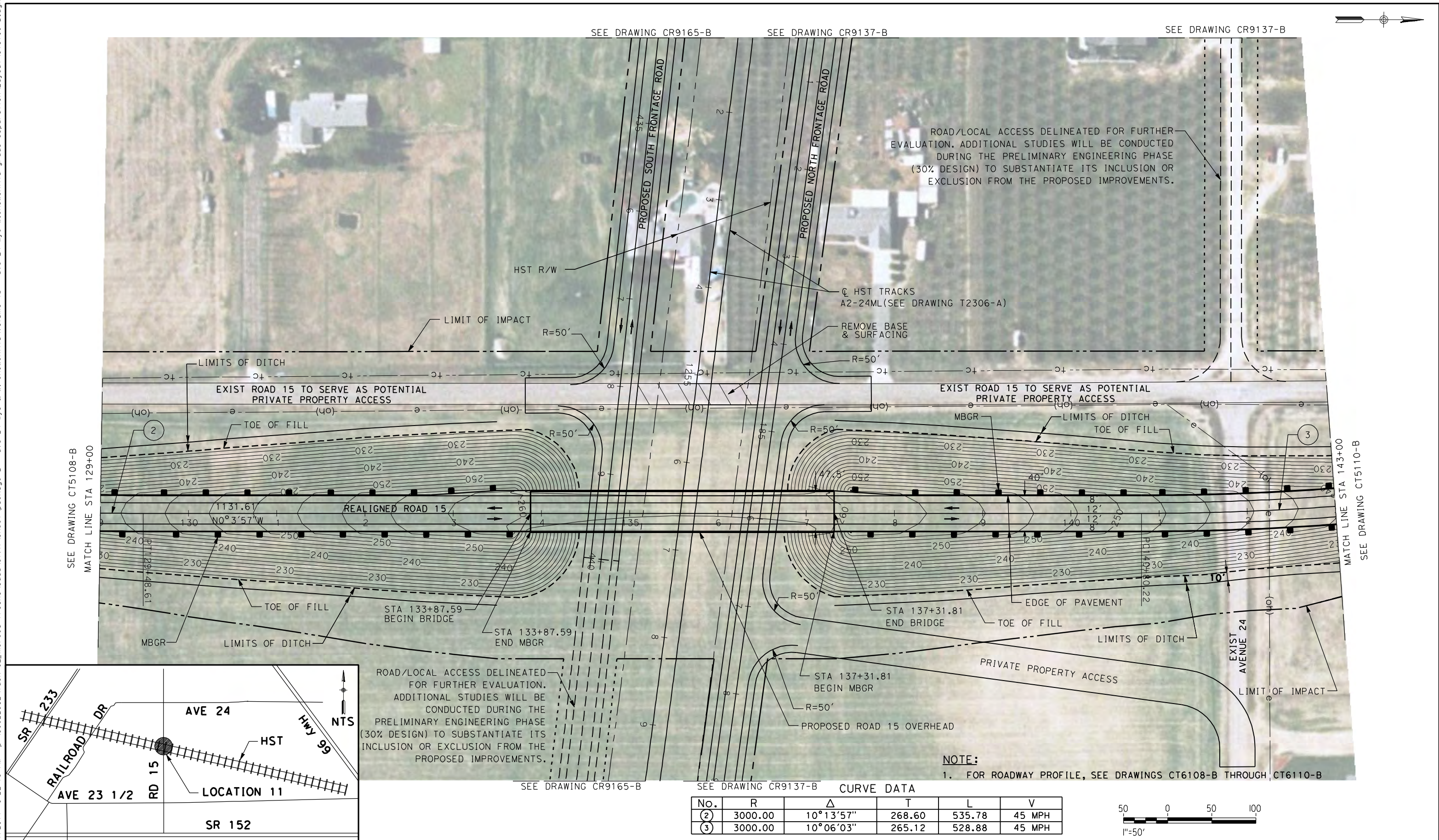
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE - (AVE 24)  
GRADE SEPARATION - ROAD 15  
LAYOUT  
SHEET 1 OF 3

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5108-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 6:22:15 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\layout\CT5109-B.dgn

ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

RECORD SET  
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SUBMITTAL  
  
NOT FOR  
CONSTRUCTION

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



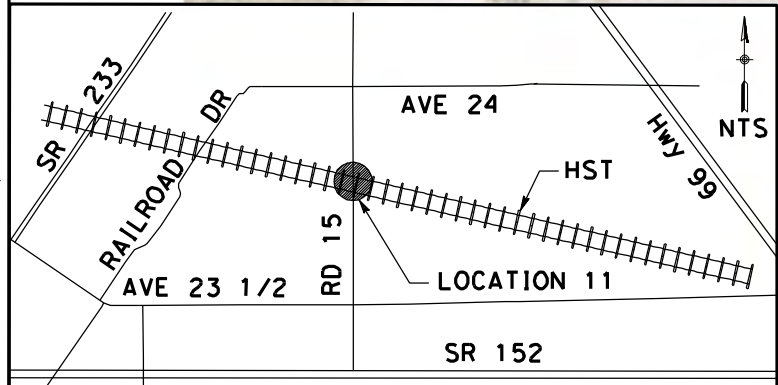
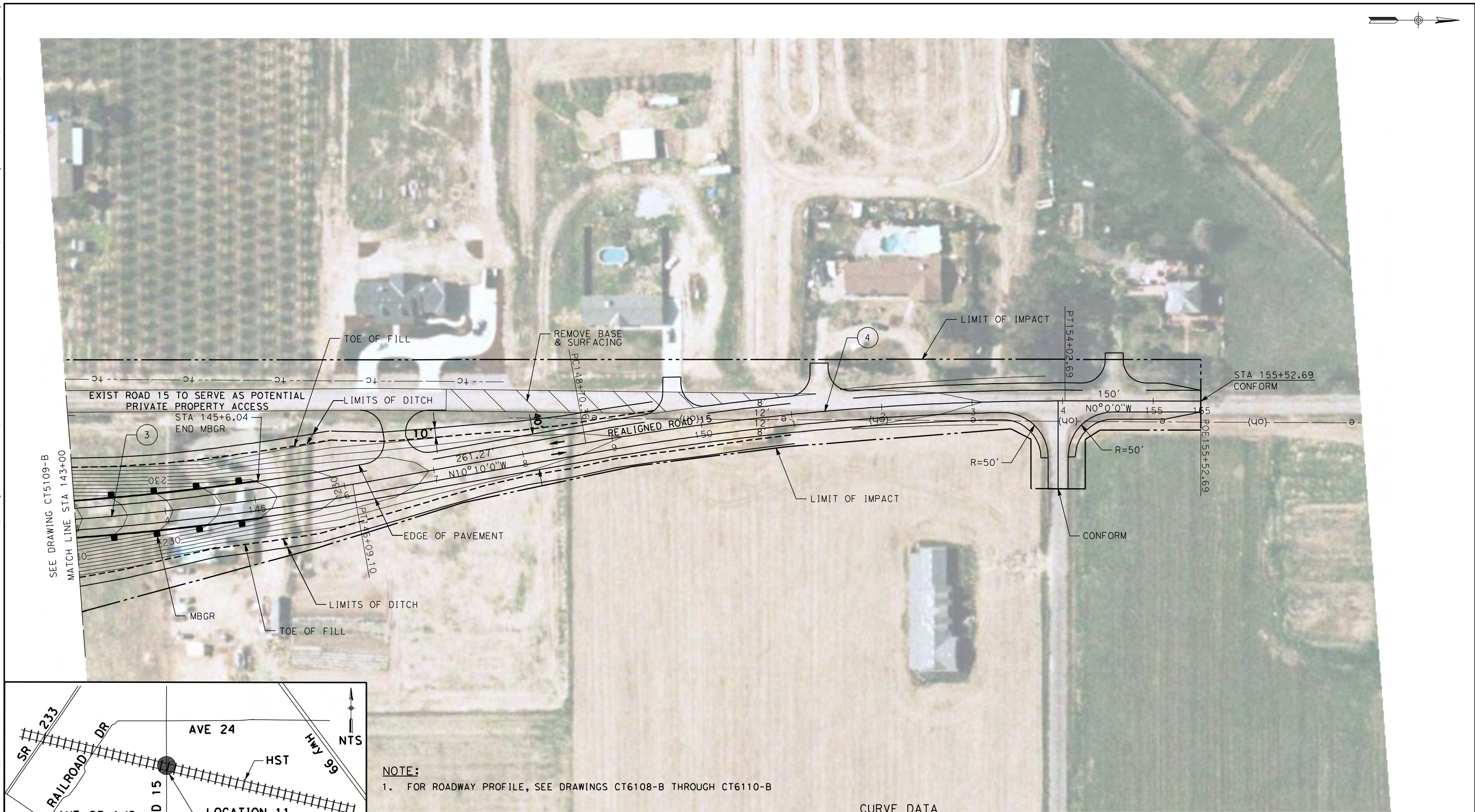
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPRR/SR99 MAINLINE - (AVE 24)  
GRADE SEPARATION - ROAD 15  
LAYOUT  
SHEET 2 OF 3

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5109-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 6:22:24 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\layout\CT5110-B.dgn

ReyesC1



NOTE:  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6108-B THROUGH CT6110-B

CURVE DATA					
No.	R	Δ	T	L	V
③	3000.00	10°06'03"	265.12	528.88	45 MPH
④	3000.00	10°10'00"	266.86	532.33	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



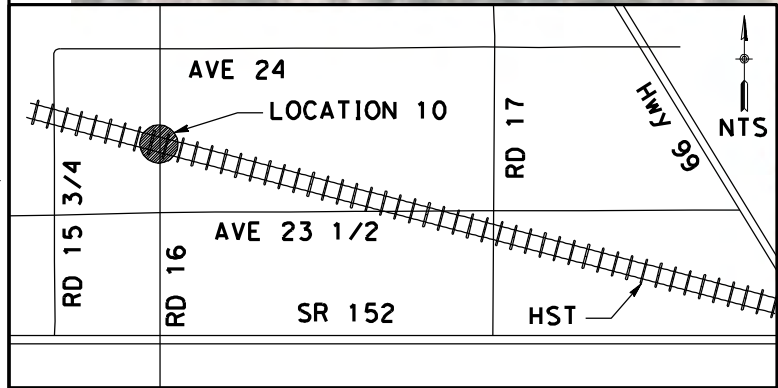
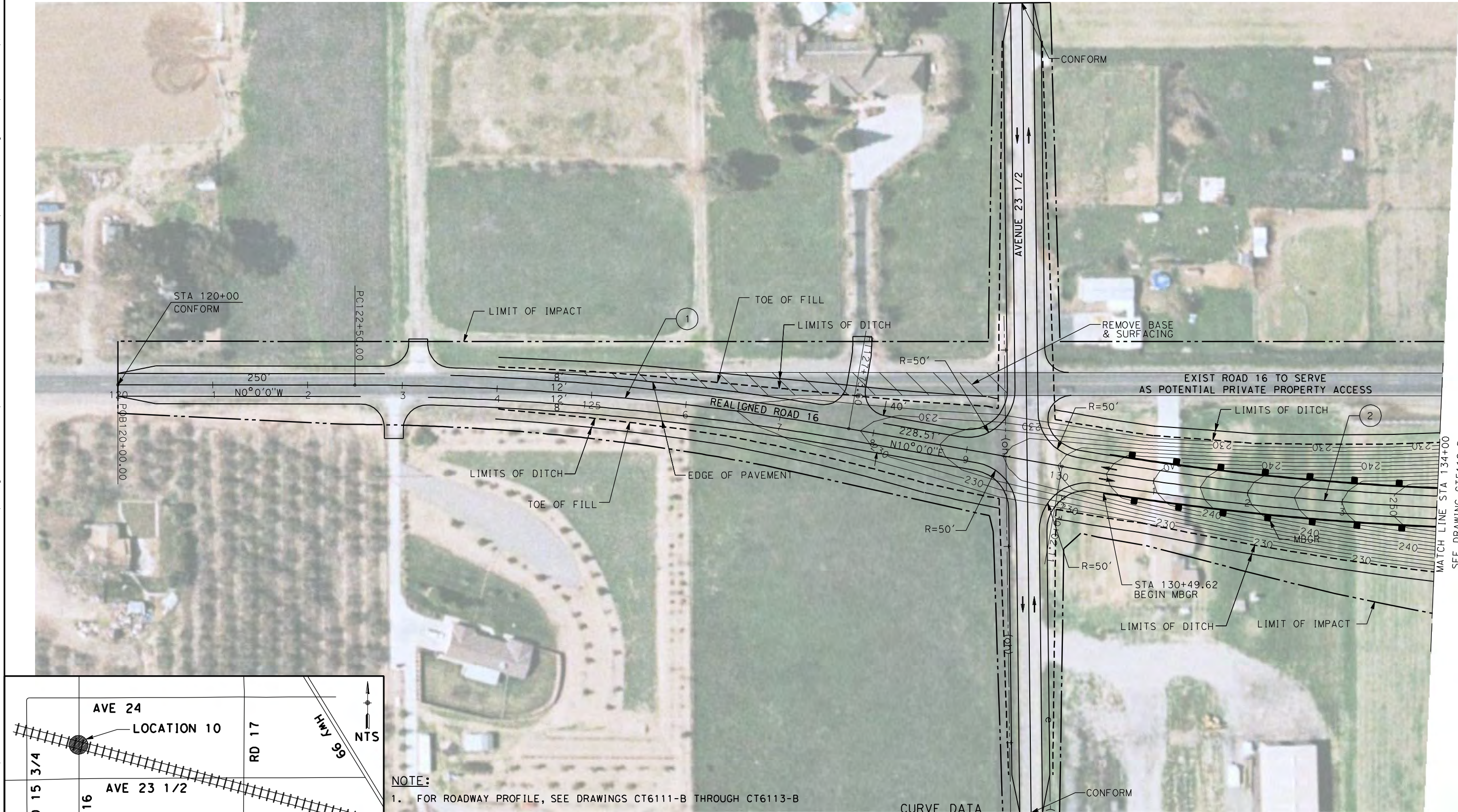
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE - (AVE 24)  
GRADE SEPARATION - ROAD 15  
LAYOUT  
SHEET 3 OF 3

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5110-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 6:22:33 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\Layout\CT5111-B.dgn

ReyesC1



**NOTE:**

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6111-B THROUGH CT6113-B

**CURVE DATA**

No.	R	$\Delta$	T	L	V
①	3000.00	10°00'00"	262.47	523.60	45 MPH
②	3000.00	10°13'57"	263.85	526.35	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**

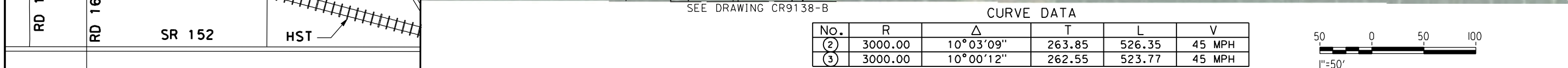


**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE - (AVE 24)  
GRADE SEPARATION - ROAD 16  
LAYOUT  
SHEET 1 OF 3

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5111-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###





DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

**NOT FOR  
CONSTRUCTION**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

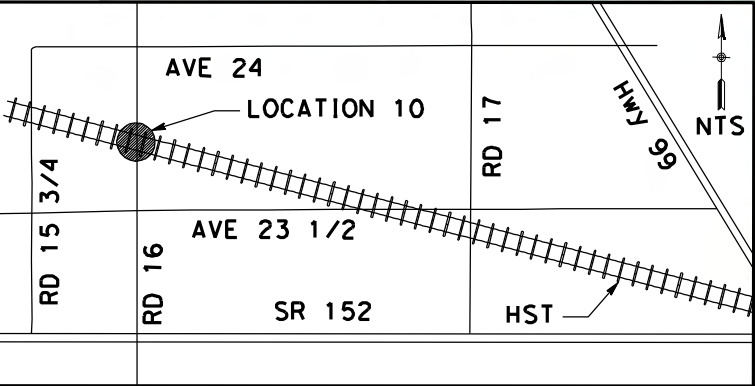
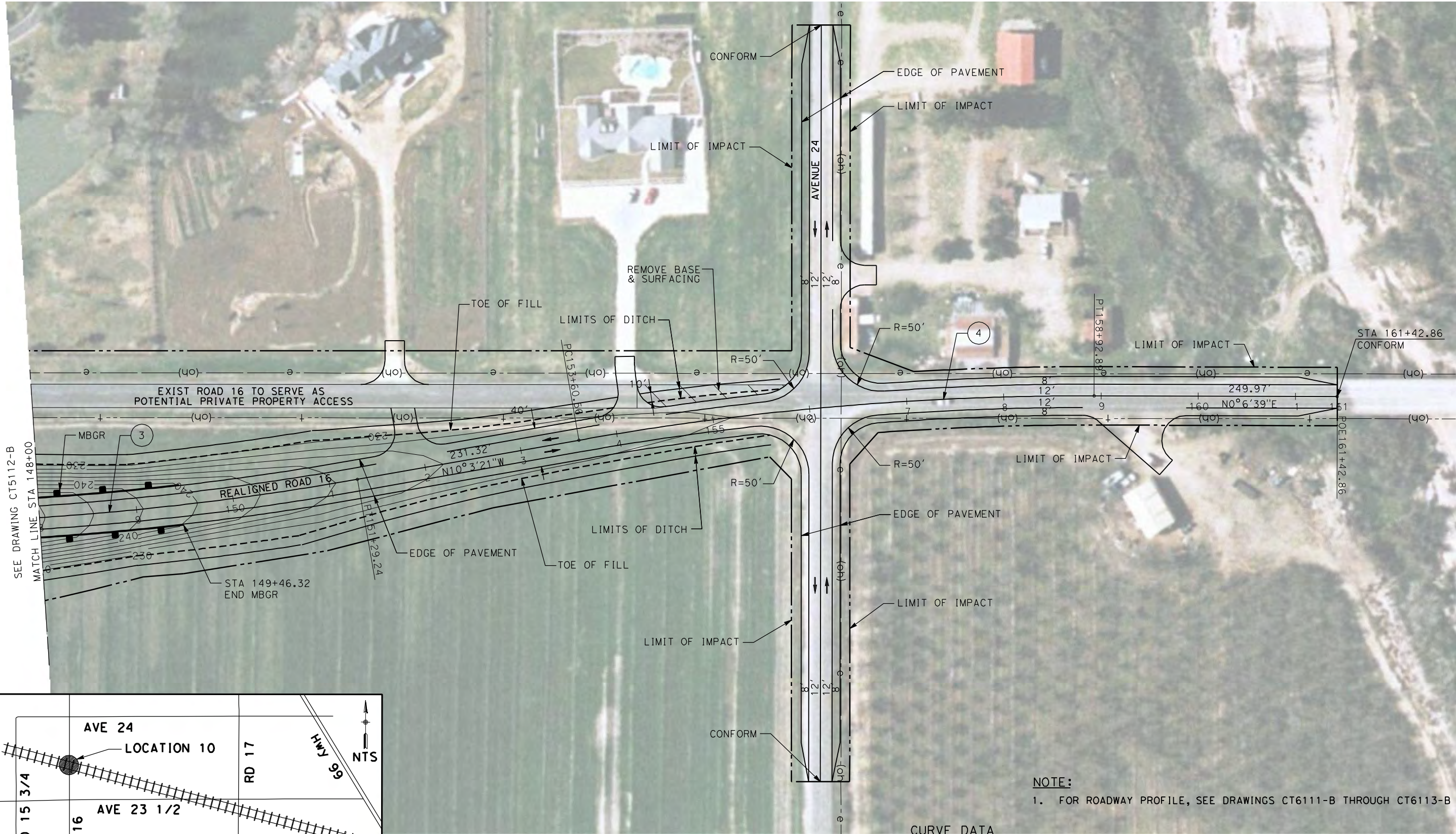
UPRR/SR99 MAINLINE - (AVE 24)  
GRADE SEPARATION - ROAD 16  
LAYOUT  
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT5112-B
SCALE AS SHOWN
SHEET NO. ### OF ###



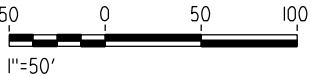
4/27/2011 6:22:54 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\layout\CT5113-B.dgn

ReyesC1



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6111-B THROUGH CT6113-B

CURVE DATA					
No.	R	Δ	T	L	V
(3)	3000.00	10°00'12"	262.55	523.77	45 MPH
(4)	3000.00	10°10'00"	266.86	532.33	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE - (AVE 24)  
GRADE SEPARATION - ROAD 16  
LAYOUT  
SHEET 3 OF 3

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5113-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###





MATCH LINE STA 139+00  
SEE DRAWING CT5115-B



DESIGNED BY	D. AYELE
DRAWN BY	C. DELOS REYES
CHECKED BY	A. SILVER
IN CHARGE	A. BOONE
DATE	04/29/2011

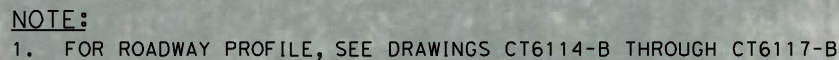
**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2M HILL**



CONTRACT NO.	HSR06-007
DRAWING NO.	CT5114-B
SCALE	AS SHOWN
SHEET NO.	### OF ###





DESIGNED BY	D. AYELE
DRAWN BY	C. DELOS REYES
CHECKED BY	A. SILVER
IN CHARGE	A. BOONE
DATE	06/30/2011

**NOT FOR  
CONSTRUCTION**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

UPRR/SR99 MAINLINE - (AVE 24)  
GRADE SEPARATION - AVENUE 23 1/2  
LAYOUT  
SHEET 2 OF 4

CONTRACT NO.	HSR06-007
DRAWING NO.	CT5115-B
SCALE	AS SHOWN
SHEET NO.	### OF ###





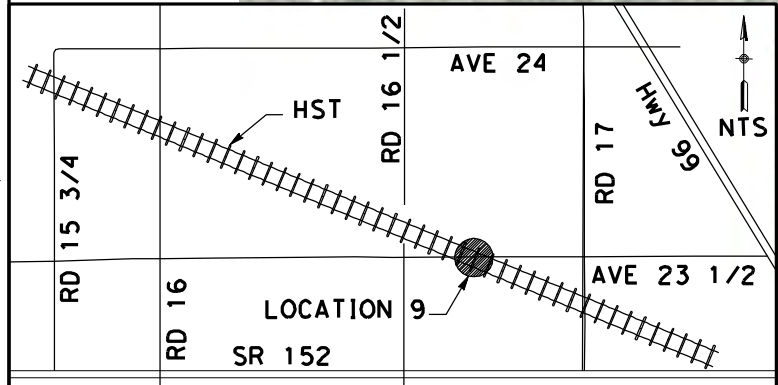
SEE DRAWING CR9140-B

REV	DATE	BY	CHK	APP	DESCRIPTION

CONTRACT NO.	HSR06-007
DRAWING NO.	CT5116-B
SCALE	AS SHOWN
SHEET NO.	### OF ###



4/27/2011 6:23:37 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\Layout\CT5117-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

NOTE:  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6114-B THROUGH CT6117-B

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**

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Sacramento, CA 95811

**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**

UPRR/SR99 MAINLINE - (AVE 24)  
GRADE SEPARATION - AVENUE 23 1/2  
LAYOUT  
SHEET 4 OF 4

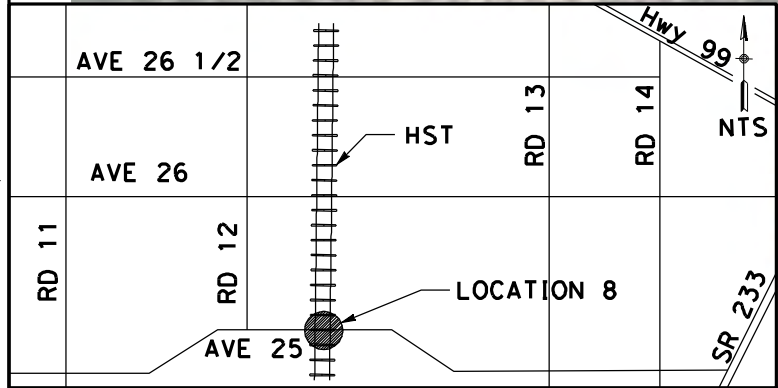
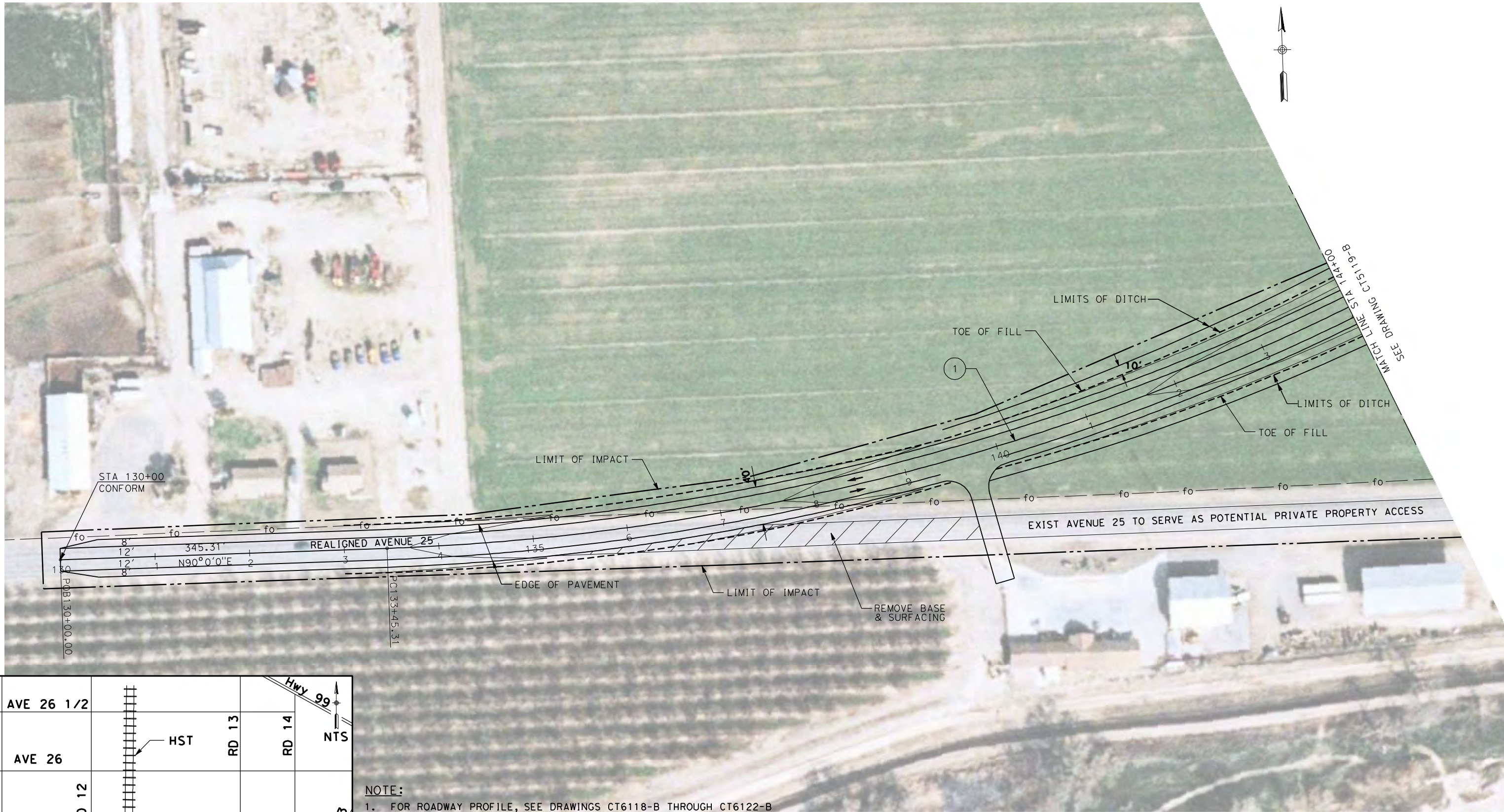
CONTRACT NO. HSR06-007
DRAWING NO. CT5117-B
SCALE AS SHOWN
SHEET NO. ### OF ###

CURVE DATA					
No.	R	Δ	T	L	V
(4)	3000.00	10° 10' 00"	266.86	532.33	45 MPH



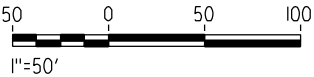
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ReyesC1



NOTE:  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6118-B THROUGH CT6122-B

CURVE DATA					
No.	R	$\Delta$	T	L	V
(1)	2500.00	31°15'00"	699.19	1363.54	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

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2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



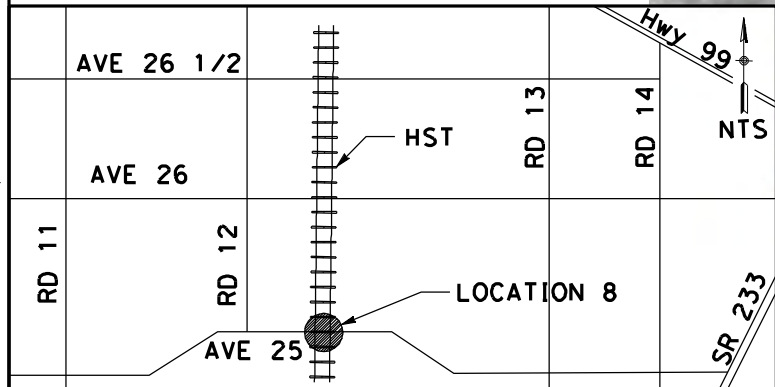
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 WYE - (AVE 24)  
GRADE SEPARATION - AVENUE 25  
LAYOUT  
SHEET 1 OF 5

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5118-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 6:23:53 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\layout\CT5119-B.dgn

ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

RECORD SET  
15% DESIGN  
SUBMITTAL  
  
NOT FOR  
CONSTRUCTION

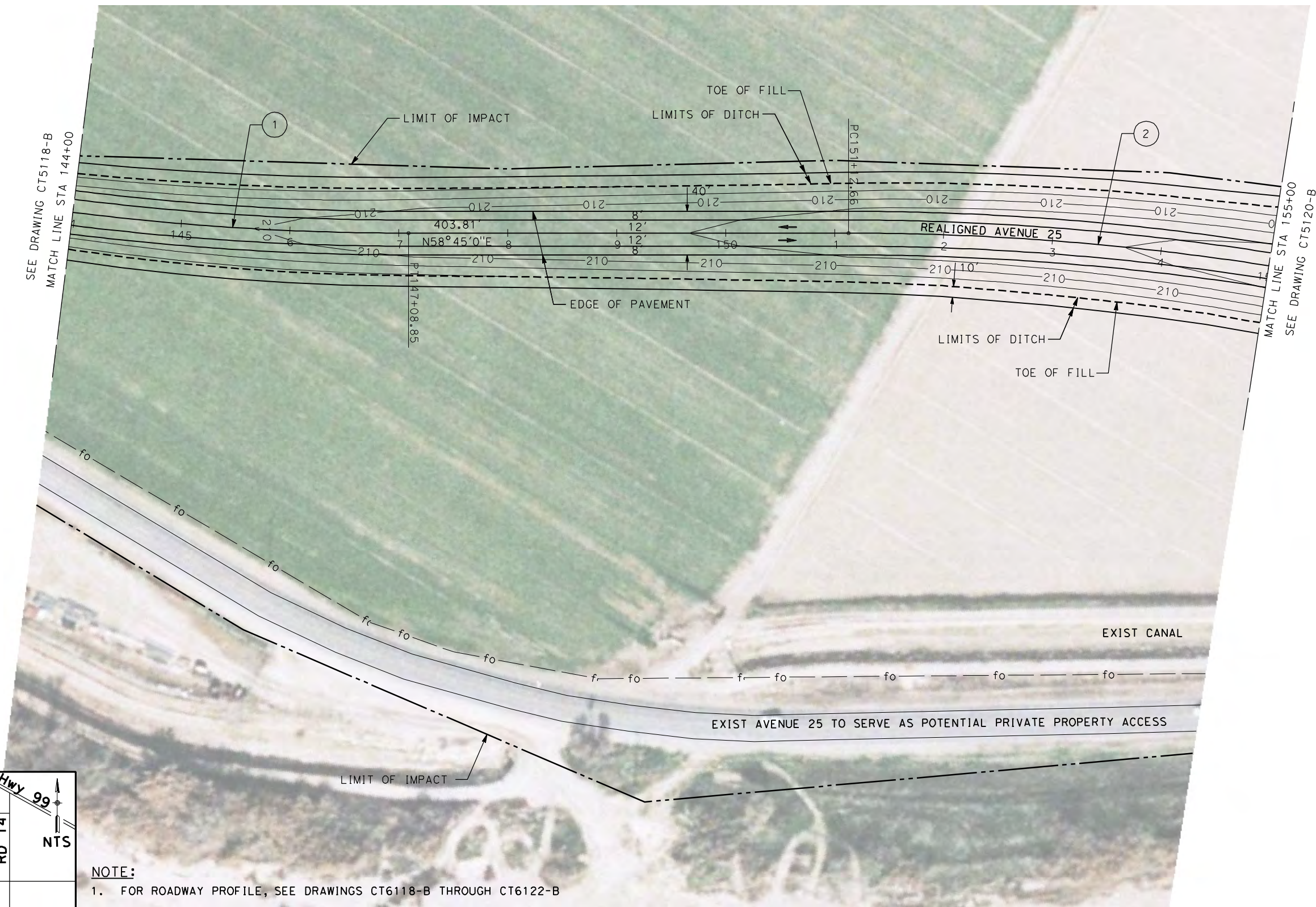
**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

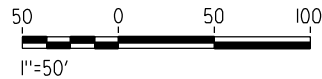
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPRR/SR99 WYE - (AVE 24)  
GRADE SEPARATION - AVENUE 25  
LAYOUT  
SHEET 2 OF 5

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5119-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



NOTE:  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6118-B THROUGH CT6122-B

CURVE DATA					
No.	R	Δ	T	L	V
①	2500.00	31°15'00"	699.19	1363.54	45 MPH
②	2500.00	33°15'00"	746.47	1450.80	45 MPH



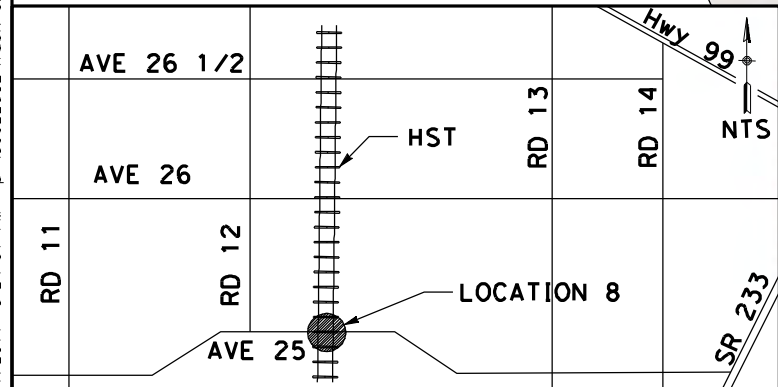
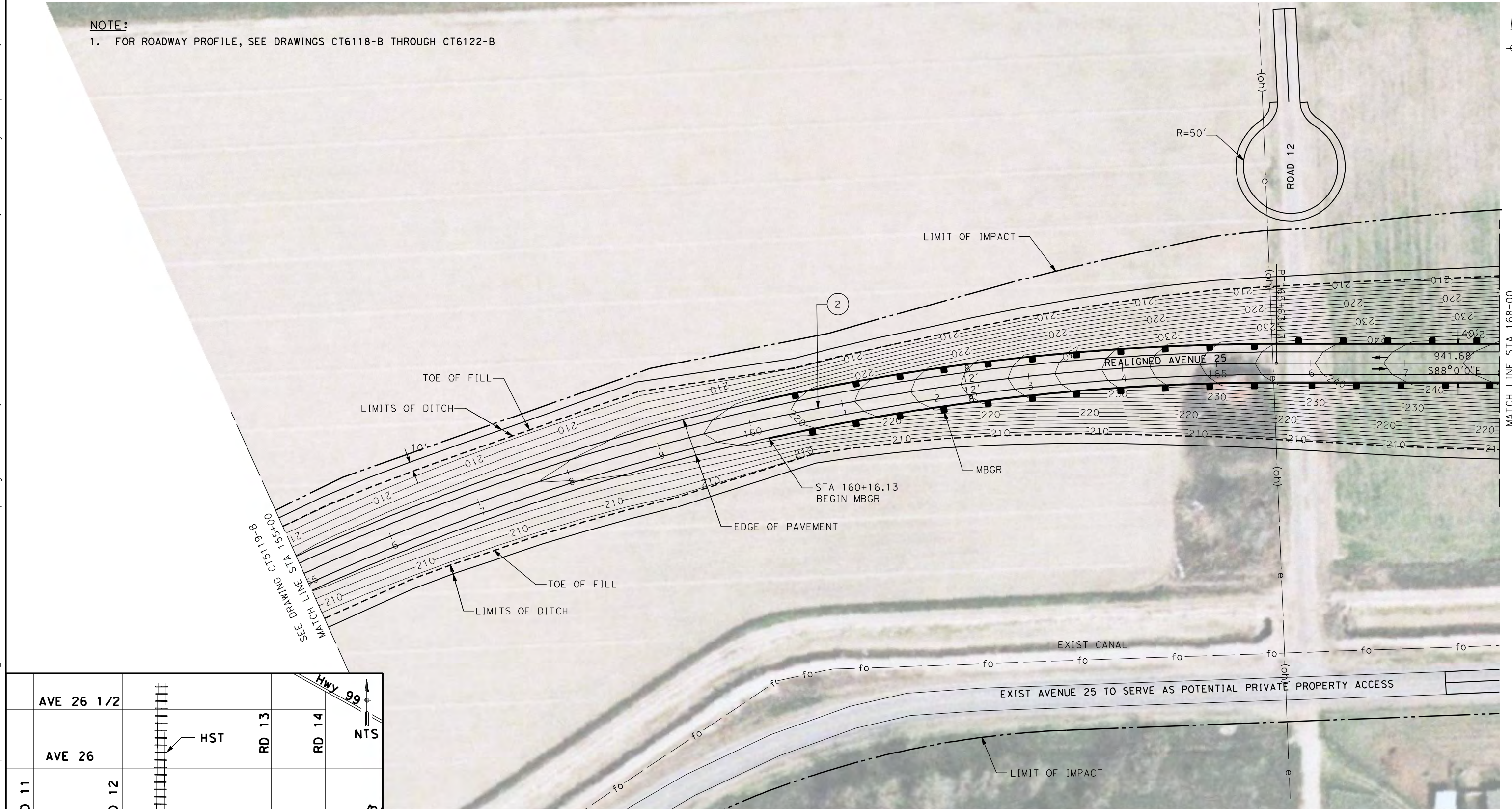


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ReyesC1

**NOTE:**

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6118-B THROUGH CT6122-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

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2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 WYE - (AVE 24)  
GRADE SEPARATION - AVENUE 25  
LAYOUT  
SHEET 3 OF 5

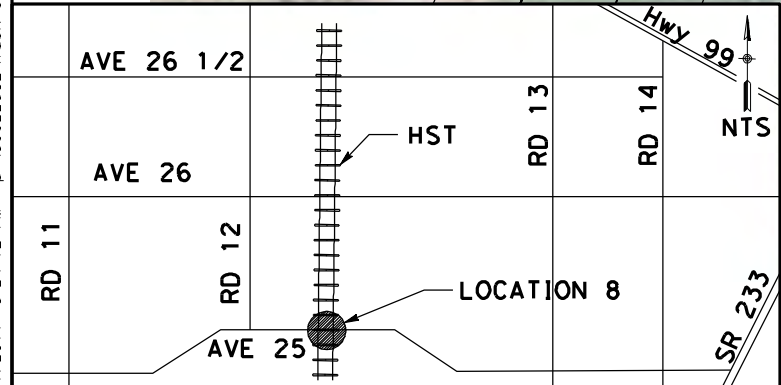
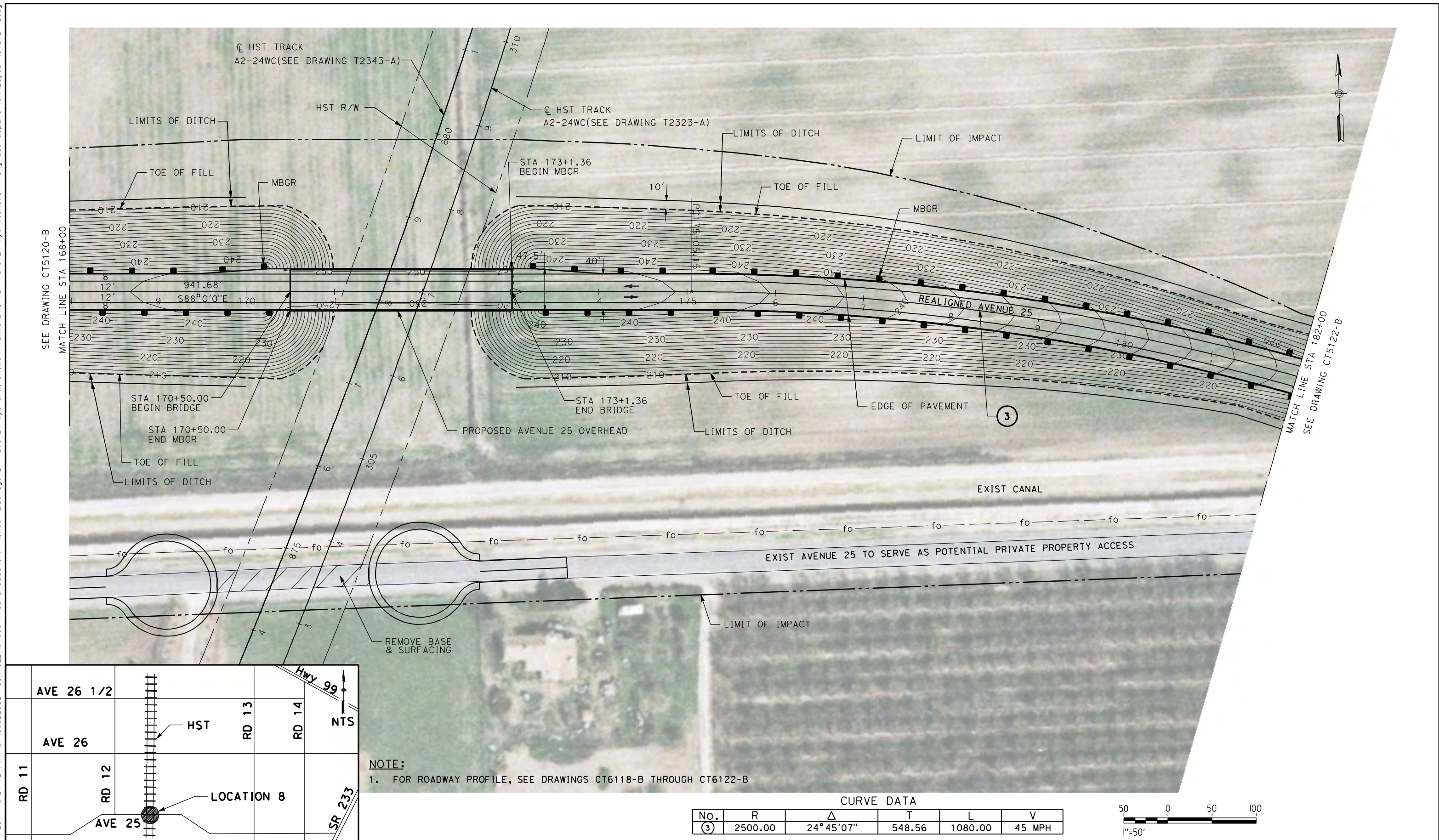
CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5120-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###

MATCH LINE STA 168+00  
SEE DRAWING CT5121-B



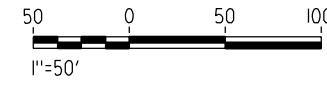
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ReyesC1



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6118-B THROUGH CT6122-B

CURVE DATA					
No.	R	$\Delta$	T	L	V
(3)	2500.00	24°45'07"	548.56	1080.00	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**

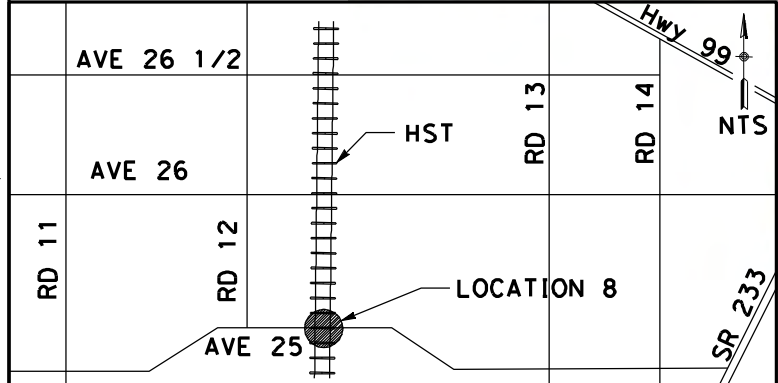
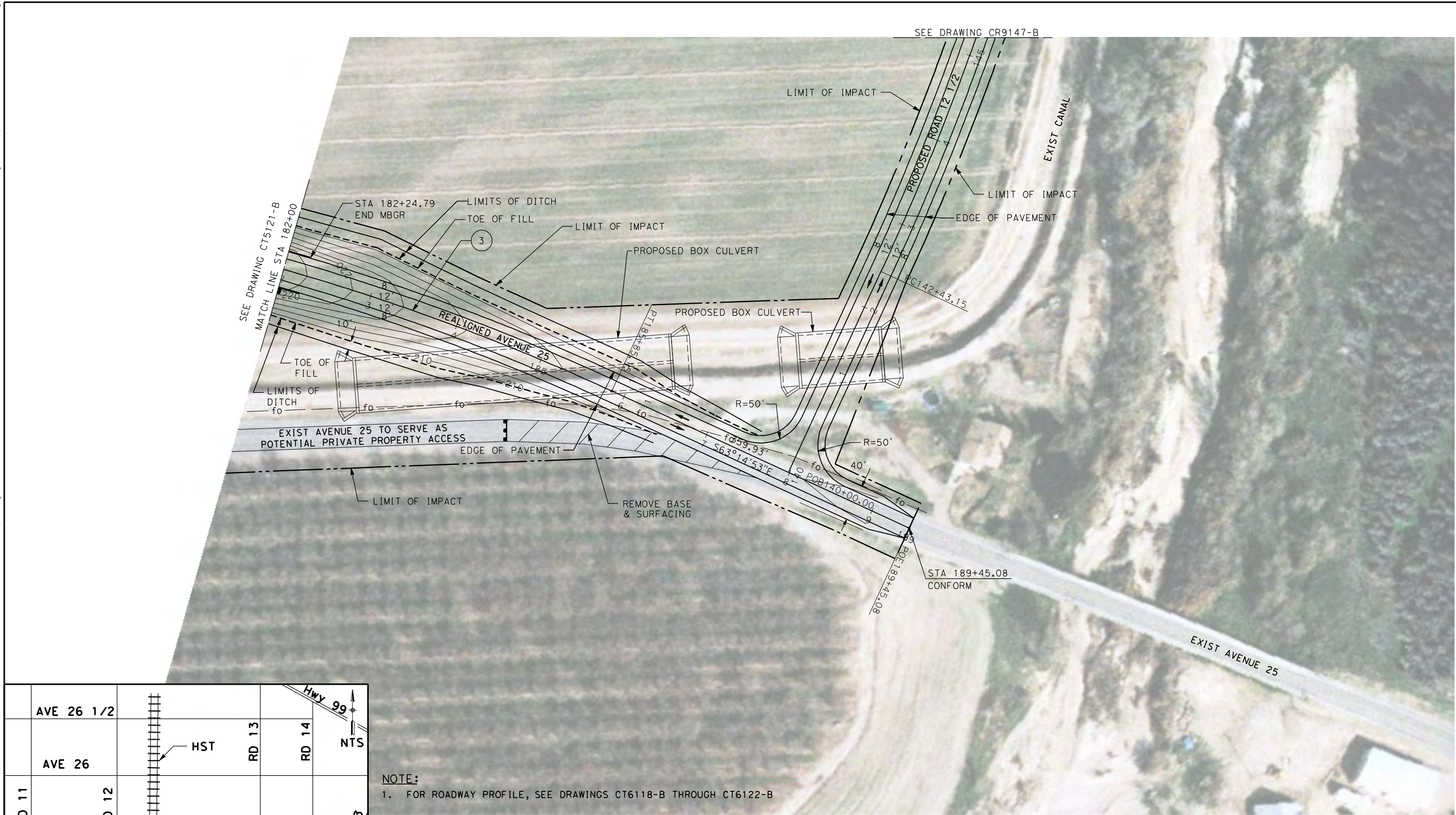


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 WYE - (AVE 24)  
GRADE SEPARATION - AVENUE 25  
LAYOUT  
SHEET 4 OF 5

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5121-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###

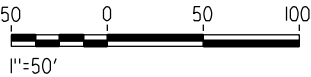


4/27/2011 6:24:21 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\layout\CT5122-B.dgn



NOTE:  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6118-B THROUGH CT6122-B

CURVE DATA					
No.	R	$\Delta$	T	L	V
(3)	2500.00	24°45'07"	548.56	1080.00	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

RECORD SET  
15% DESIGN  
SUBMITTAL  
  
NOT FOR  
CONSTRUCTION

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**

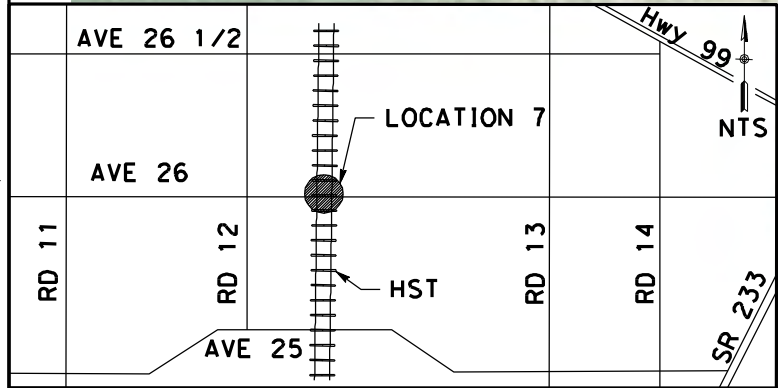


**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPRR/SR99 WYE - (AVE 24)  
GRADE SEPARATION - AVENUE 25  
LAYOUT  
SHEET 5 OF 5

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5122-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###

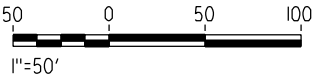


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NOTE:  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6123-B THROUGH CT6125-B

No.	R	$\Delta$	T	L	V
①	3000.00	10°00'00"	262.47	523.60	45 MPH
②	3000.00	10°21'05"	271.74	541.99	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

RECORD SET  
15% DESIGN  
SUBMITTAL  
  
NOT FOR  
CONSTRUCTION

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

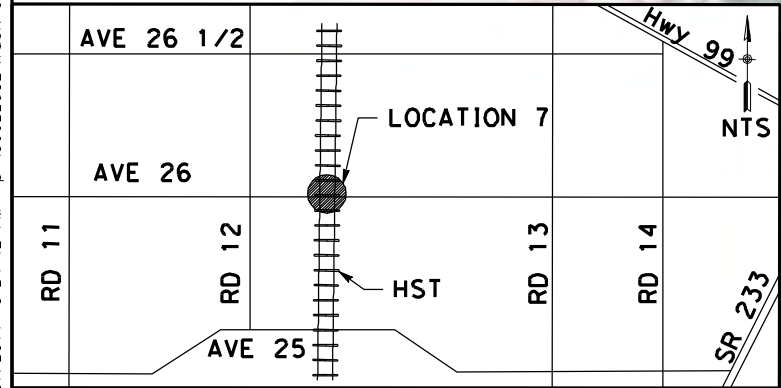
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPRR/SR99 WYE - (AVE 24)  
GRADE SEPARATION - AVENUE 26  
LAYOUT  
SHEET 1 OF 3

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5123-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 6:24:42 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w.chowchilla\volume 1b - ave 24 wye-w.chowchilla\grade separation\layout\CT5124-B.dgn

ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**

**AECOM**  
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2020 L Street, Suite 300  
Sacramento, CA 95811

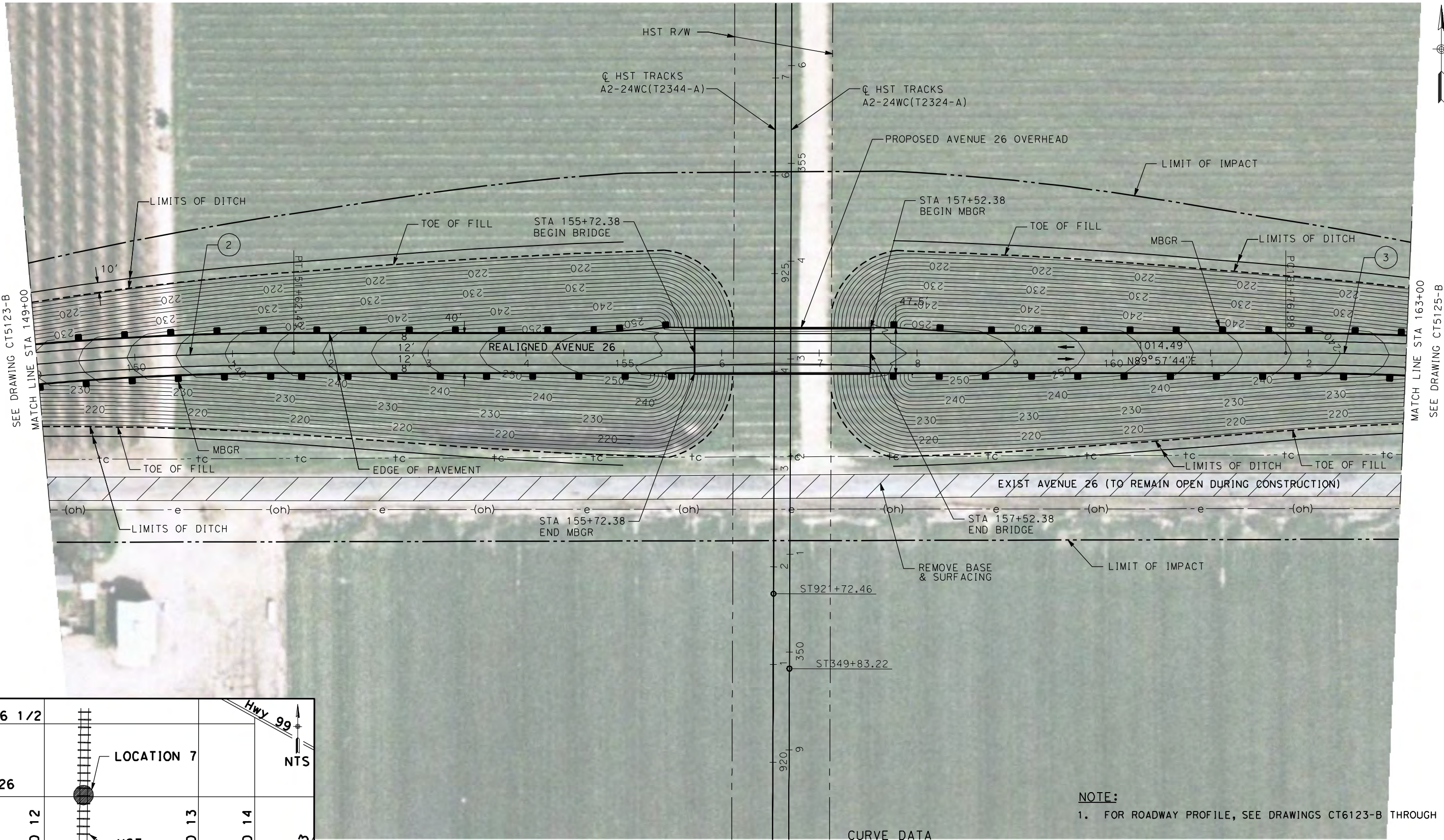
**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 WYE - (AVE 24)  
GRADE SEPARATION - AVENUE 26  
LAYOUT  
SHEET 2 OF 3

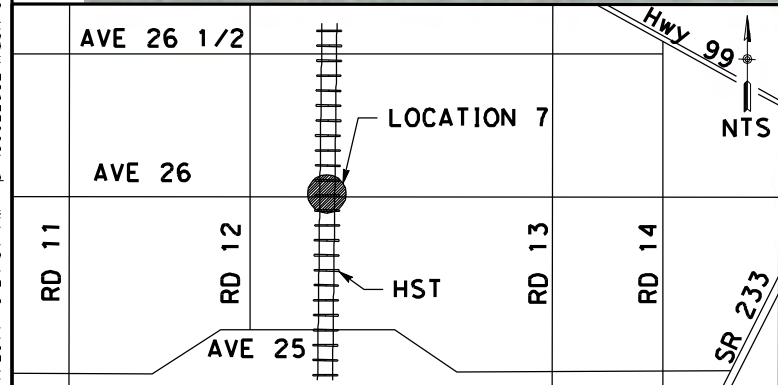
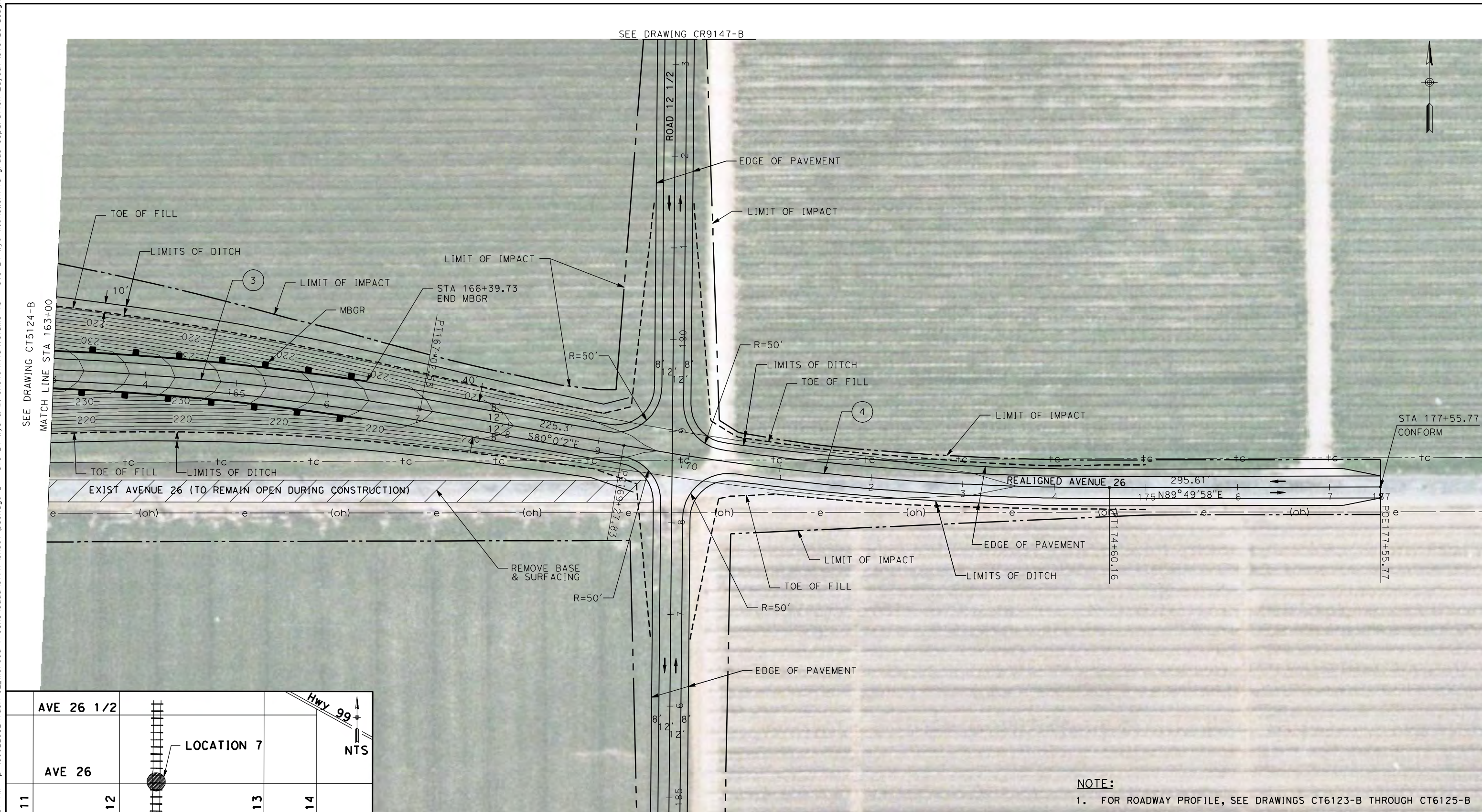
CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5124-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###





4/27/2011 6:24:51 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\layout\CT5125-B.dgn

ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 WYE - (AVE 24)  
GRADE SEPARATION - AVENUE 26  
LAYOUT  
SHEET 3 OF 3

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5125-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###

CURVE DATA					
No.	R	$\Delta$	T	L	V
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④	3000.00	10°10'00"	266.86	532.33	45 MPH

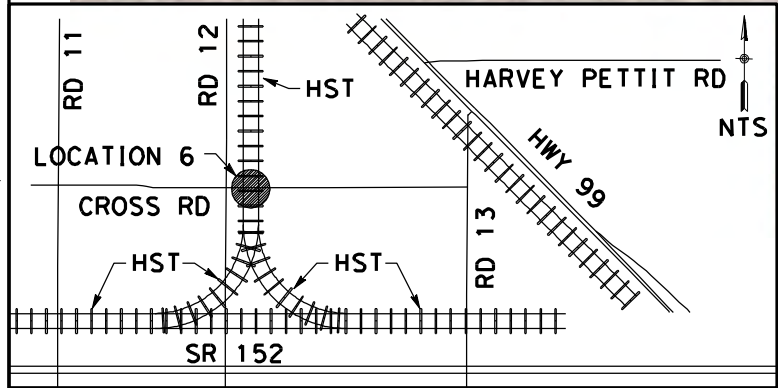


**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6123-B THROUGH CT6125-B



4/27/2011 6:25:00 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\layout\CT5126-B.dgn

ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2MHILL**



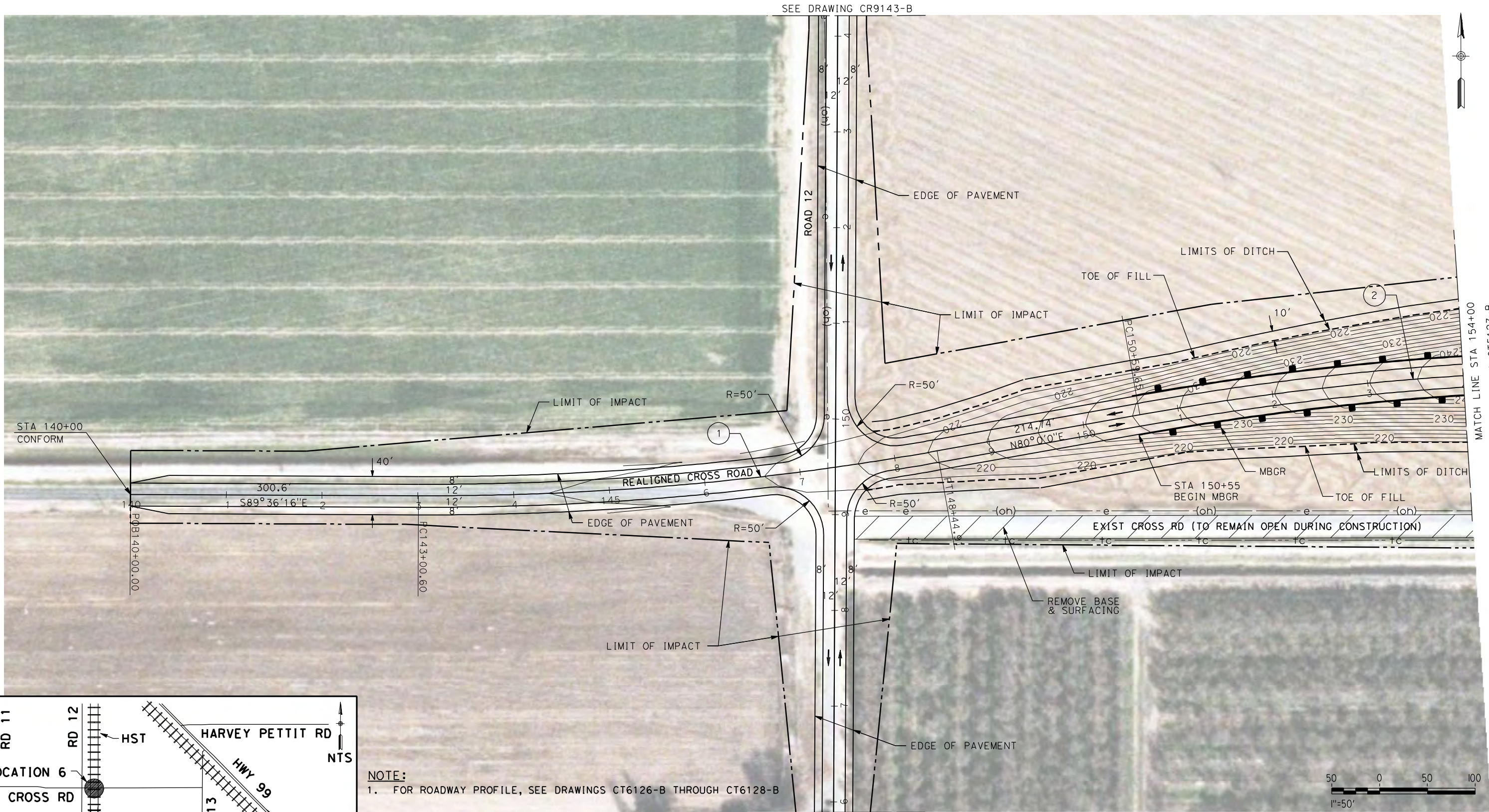
**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**

UPRR/SR99 WYE - (AVE 24)  
GRADE SEPARATION - CROSS ROAD  
LAYOUT

SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT5126-B
SCALE AS SHOWN
SHEET NO. ### OF ###

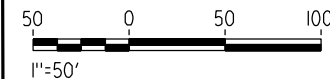
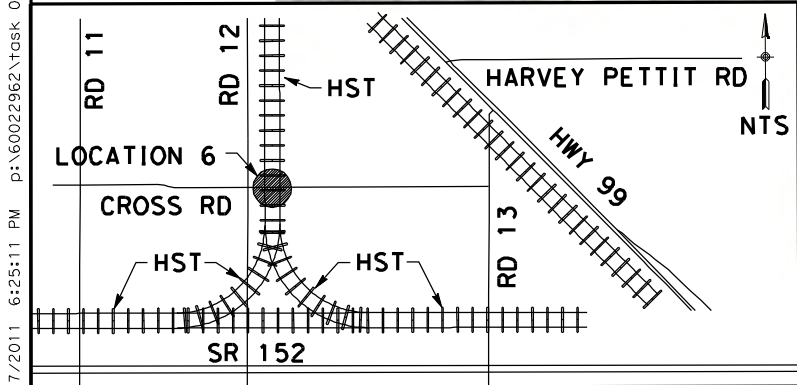


**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6126-B THROUGH CT6128-B

No.	R	$\Delta$	T	L	V
①	3000.00	10°23'44"	272.90	544.31	45 MPH
②	3000.00	10°08'10"	266.06	530.73	45 MPH



4/27/2011 6:25:11 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w.chowchilla grade separation\layout\CT5127-B.dgn



DESIGNED BY  
D. AYELE

DRAWN BY  
C. DELOS REYES

CHECKED BY  
A. SILVER

IN CHARGE  
A. BOONE

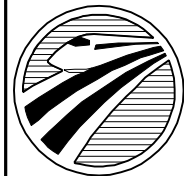
DATE  
04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**

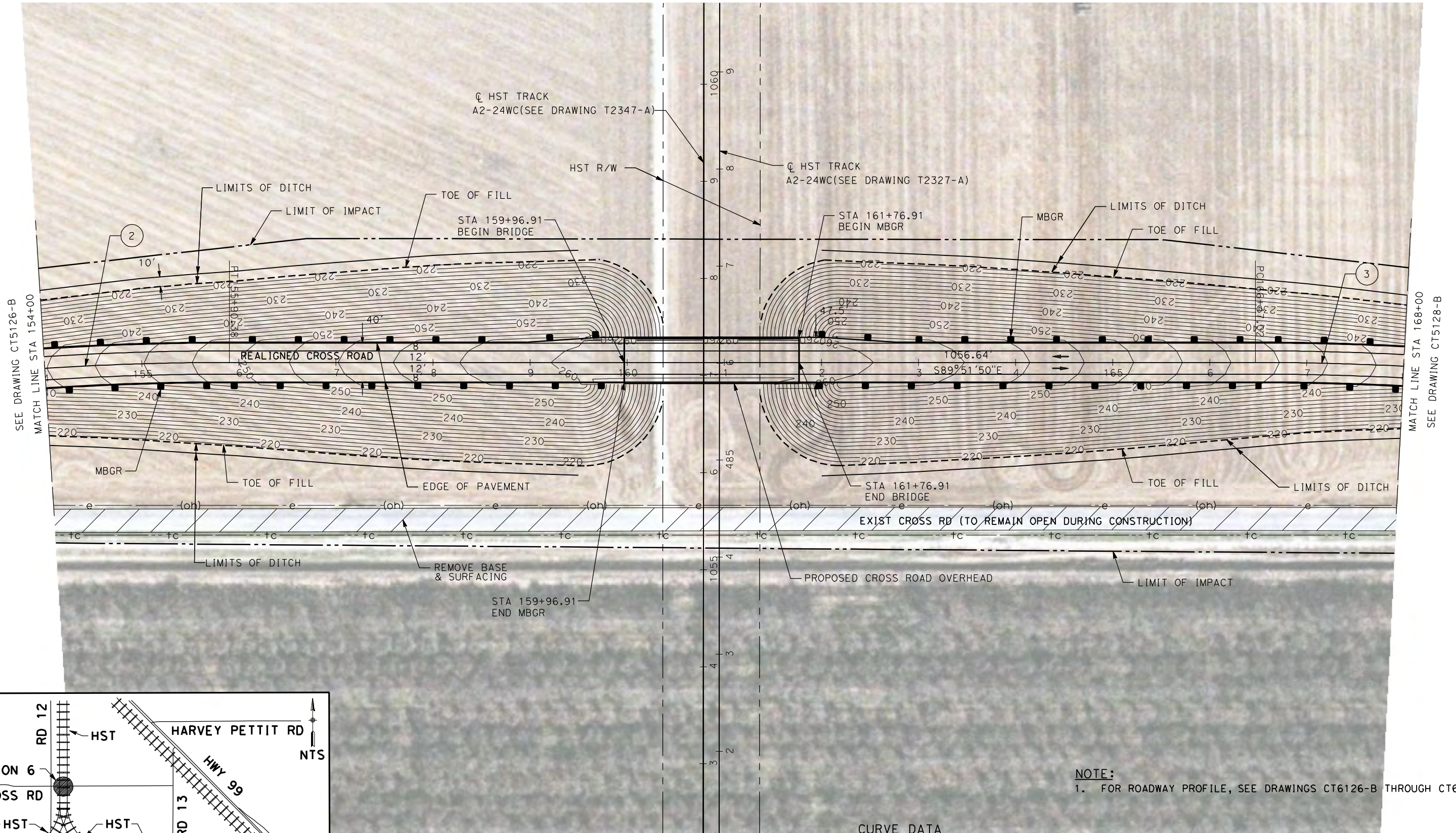
UPRR/SR99 WYE - (AVE 24)  
GRADE SEPARATION - CROSS ROAD  
LAYOUT  
SHEET 2 OF 3

CONTRACT NO.  
HSR06-007

DRAWING NO.  
CT5127-B

SCALE  
AS SHOWN

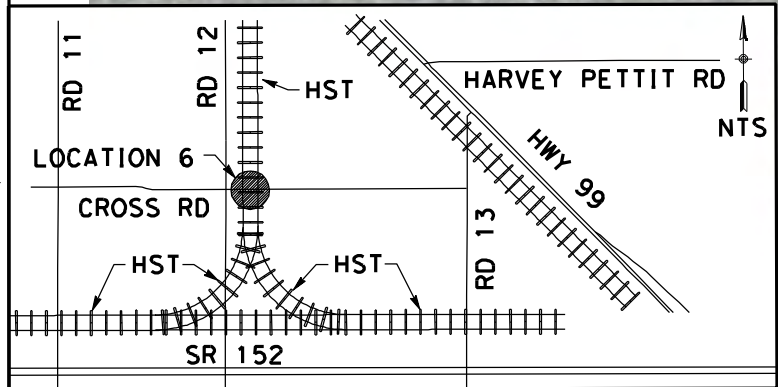
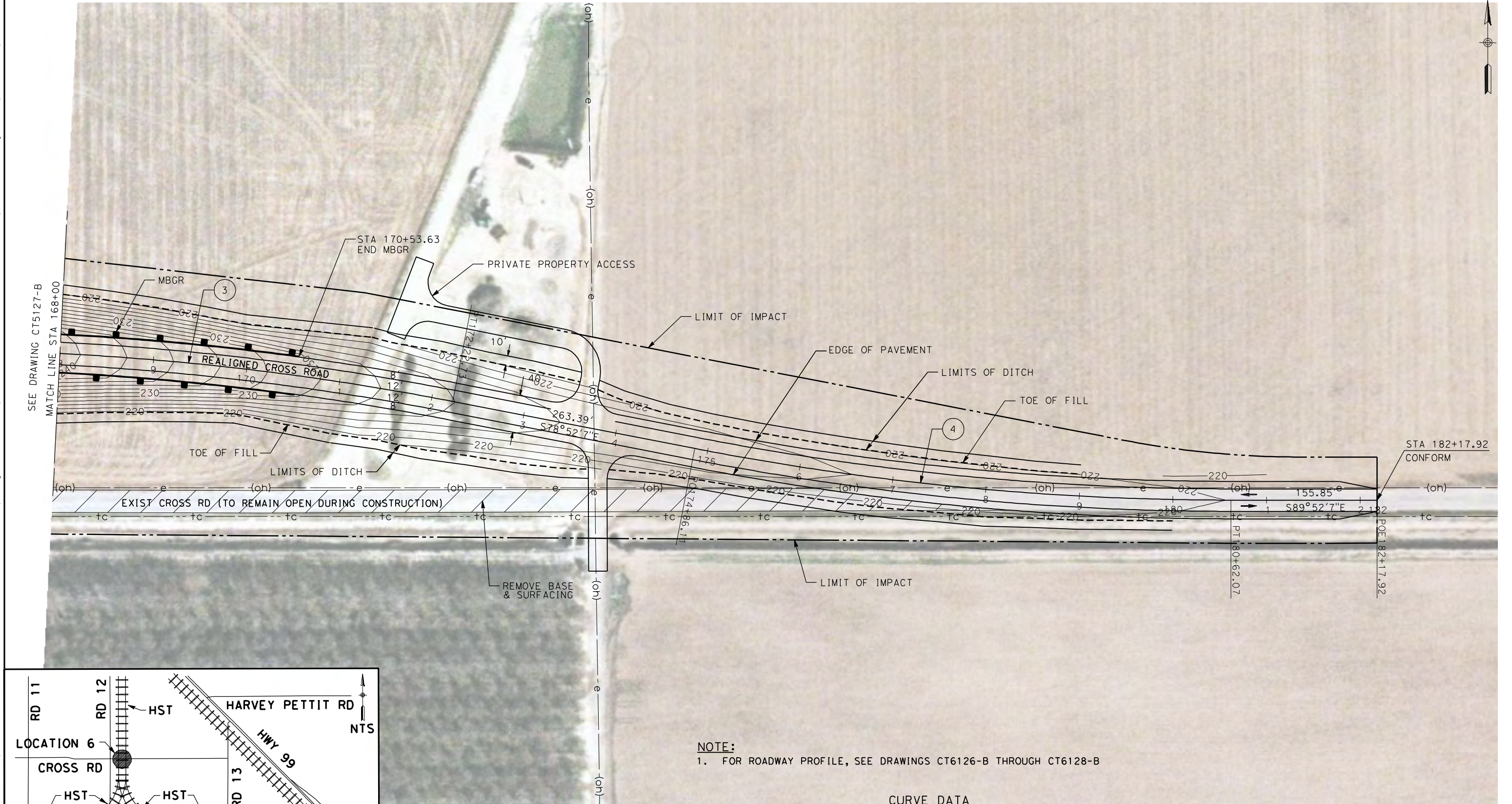
SHEET NO.  
### OF ###





4/27/2011 6:25:21 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\layout\CT5128-B.dgn

ReyesC1



**NOTE:**

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6126-B THROUGH CT6128-B

**CURVE DATA**

No.	R	$\Delta$	T	L	V
③	3000.00	10°59'43"	288.74	575.71	45 MPH
④	3000.00	11°00'00"	288.87	575.96	45 MPH

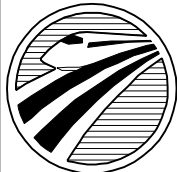
REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

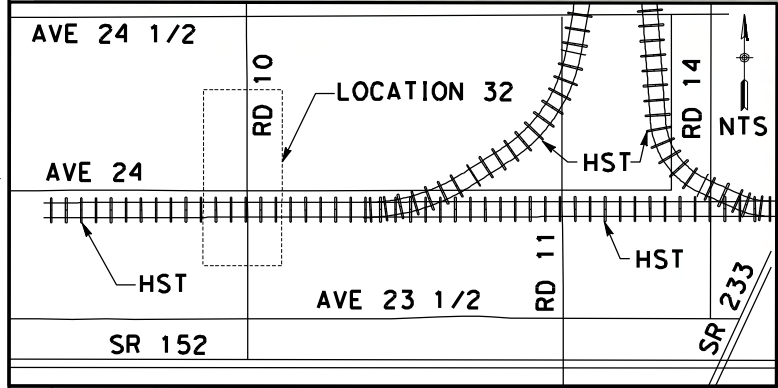
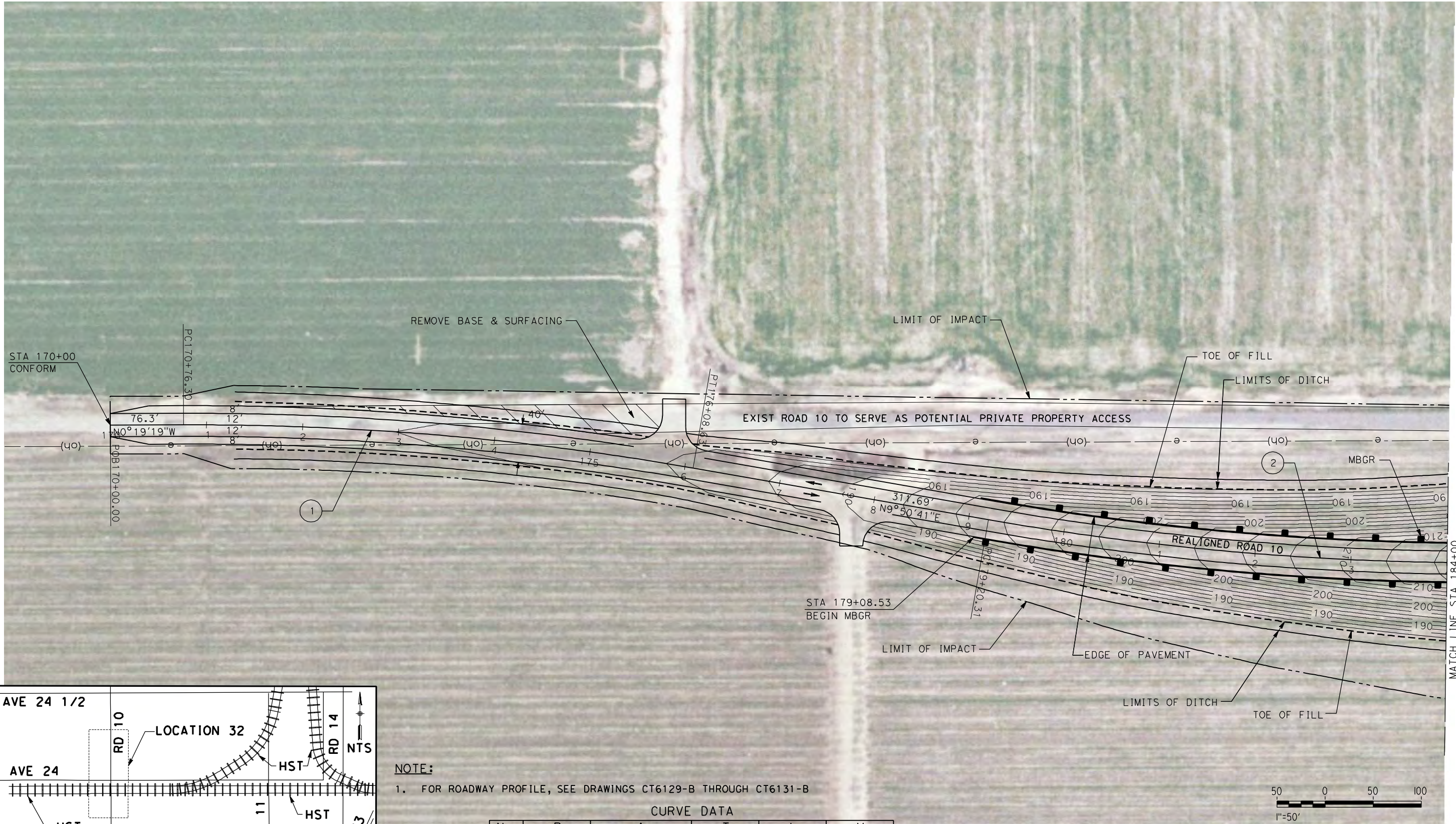
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**

UPRR/SR99 WYE - (AVE 24)  
GRADE SEPARATION - CROSS ROAD  
LAYOUT  
SHEET 3 OF 3

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5128-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 6:25:37 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\layout\CT5129-B.dgn



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6129-B THROUGH CT6131-B

CURVE DATA					
No.	R	Δ	T	L	V
①	3000.00	79°50'0"	266.86	532.33	45 MPH
②	3000.00	79°40'17"	271.14	540.81	45 MPH

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**

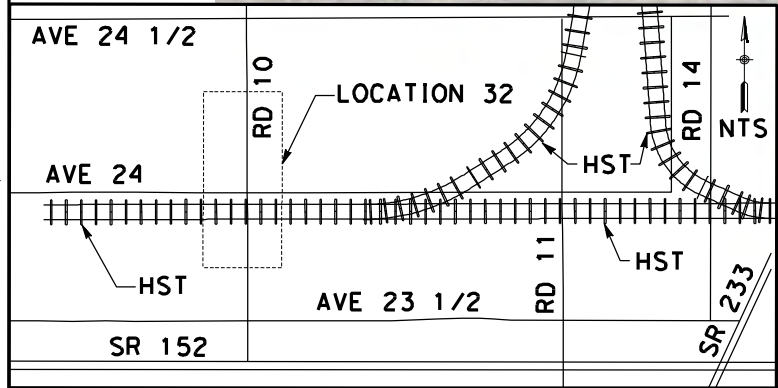
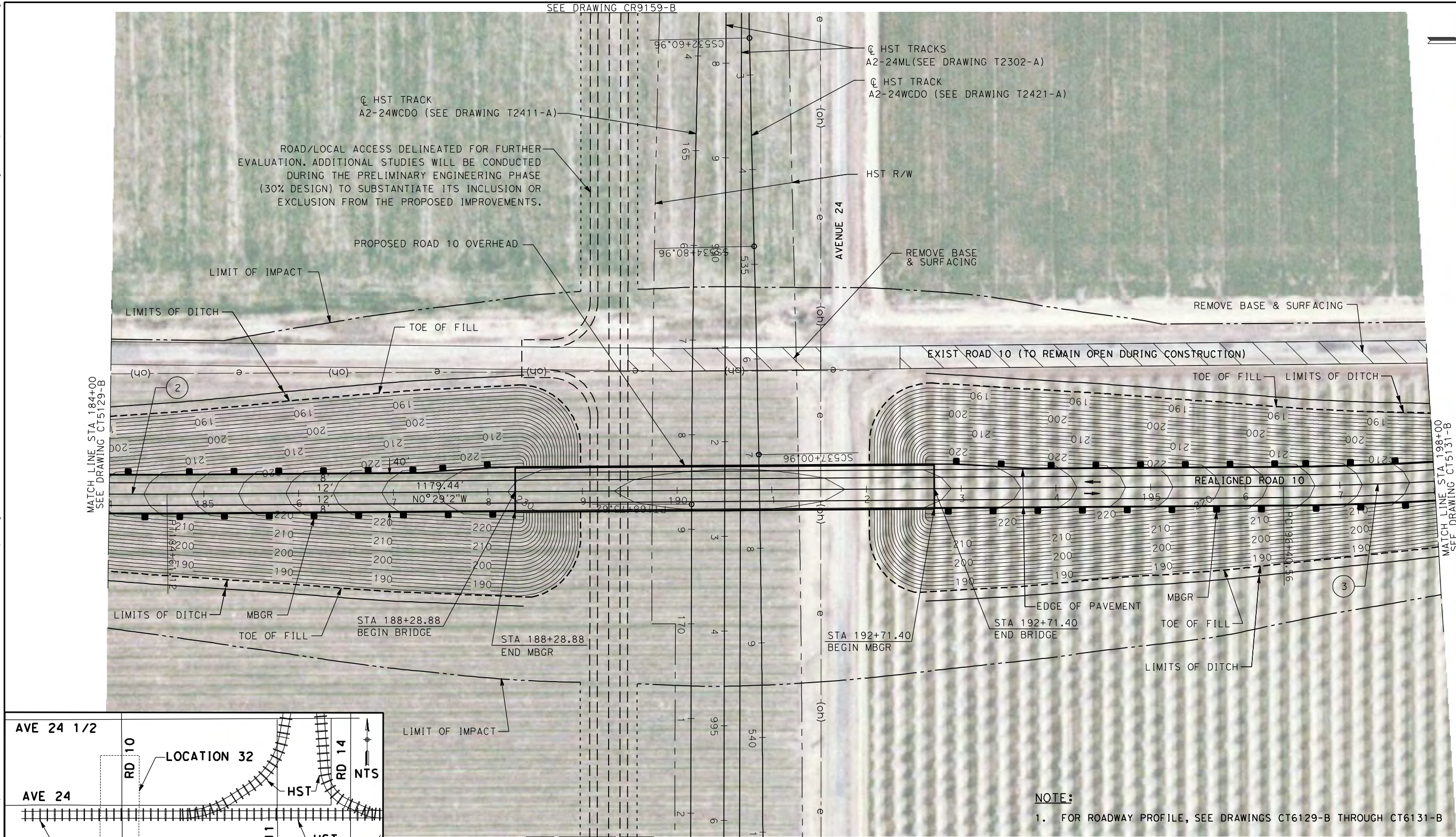


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE/WYE - (WC)  
GRADE SEPARATION - ROAD 10 ALT 1  
LAYOUT  
SHEET 1 OF 3

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5129-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 6:25:54 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\layout\CT5130-B.dgn



CURVE DATA					
No.	R	Δ	T	L	V
(2)	3000.00	79°40'17"	271.14	540.81	45 MPH
(3)	3000.00	79°52'52"	265.60	529.82	45 MPH

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

RECORD SET  
15% DESIGN  
SUBMITTAL  
  
NOT FOR  
CONSTRUCTION

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**

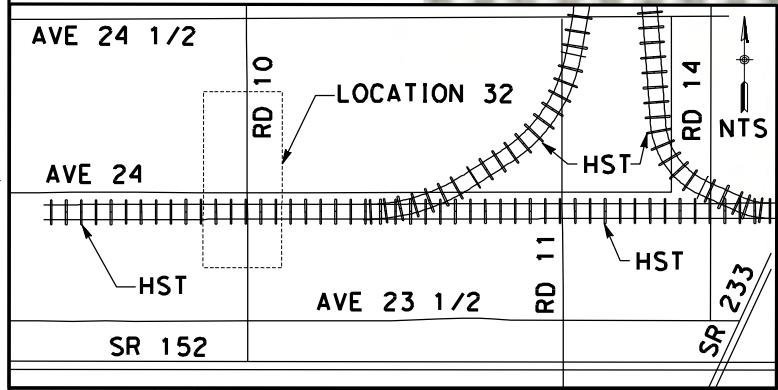


**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPRR/SR99 MAINLINE/WYE - (WC)  
GRADE SEPARATION - ROAD 10 ALT 1  
LAYOUT  
SHEET 2 OF 3

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5130-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 6:26:10 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\layout\CT5131-B.dgn



NOTE:  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6129-B THROUGH CT6131-B

CURVE DATA					
No.	R	Δ	T	L	V
③	3000.00	79°52'52"	265.60	529.82	45 MPH
④	3000.00	79°50'0"	266.86	532.33	45 MPH

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

RECORD SET  
15% DESIGN  
SUBMITTAL  
  
NOT FOR  
CONSTRUCTION

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



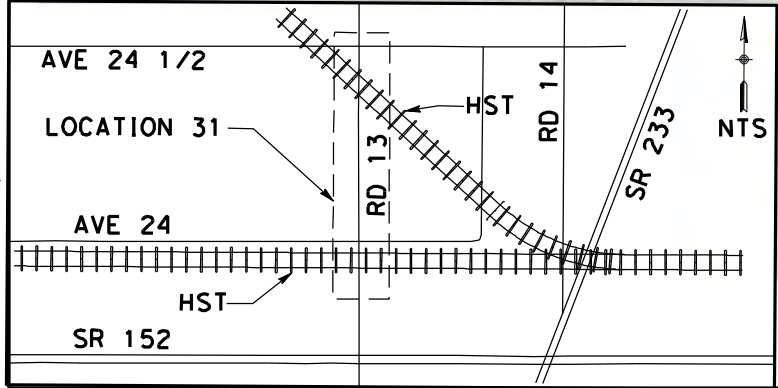
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPRR/SR99 MAINLINE/WYE - (WC)  
GRADE SEPARATION - ROAD 10 ALT 1  
LAYOUT  
SHEET 3 OF 3

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5131-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



1/5/2012 1:30:42 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\layout\CT5132-B.dgn

ReyesC1



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6132-B THROUGH CT6136-B

CURVE DATA					
No.	R	Δ	T	L	V
①	3000.00	10°07'43"	265.86	530.34	45 MPH
②	3000.00	10°00'07"	262.52	523.71	45 MPH

REV	DATE	BY	CHK	APP	DESCRIPTION
1	12/28/11	RG			

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
06/30/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**

UPRR/SR99 MAINLINE/MERCED DO - (WC)  
GRADE SEPARATION - ROAD 13  
LAYOUT  
SHEET 1 OF 5

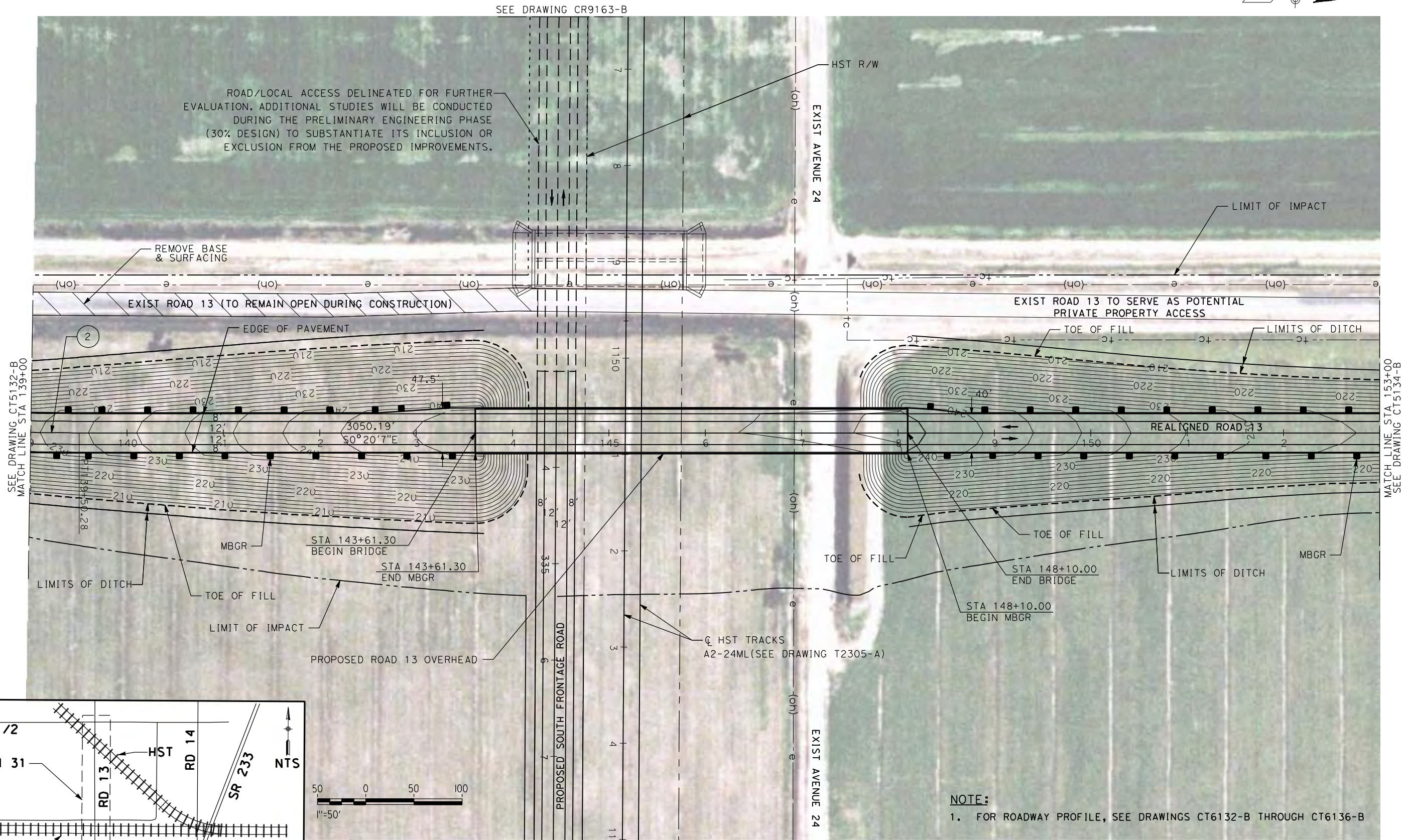
CONTRACT NO.  
HSR06-007

DRAWING NO.  
CT5132-B

SCALE  
AS SHOWN

SHEET NO.  
### OF ###





CURVE DATA					
No.	R	$\Delta$	T	L	V
(2)	3000.00	10°00'07"	262.52	523.71	45 MPH

1	12/28/11	RG			
REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY	D. AYELE
DRAWN BY	C. DELOS REYES
CHECKED BY	A. SILVER
IN CHARGE	A. BOONE
DATE	06/30/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2MHILL**



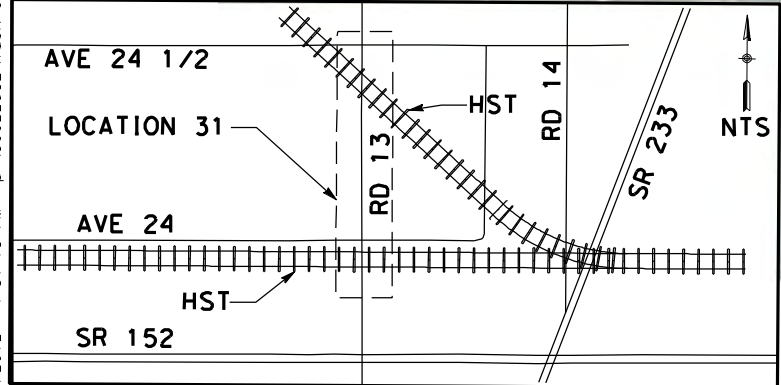
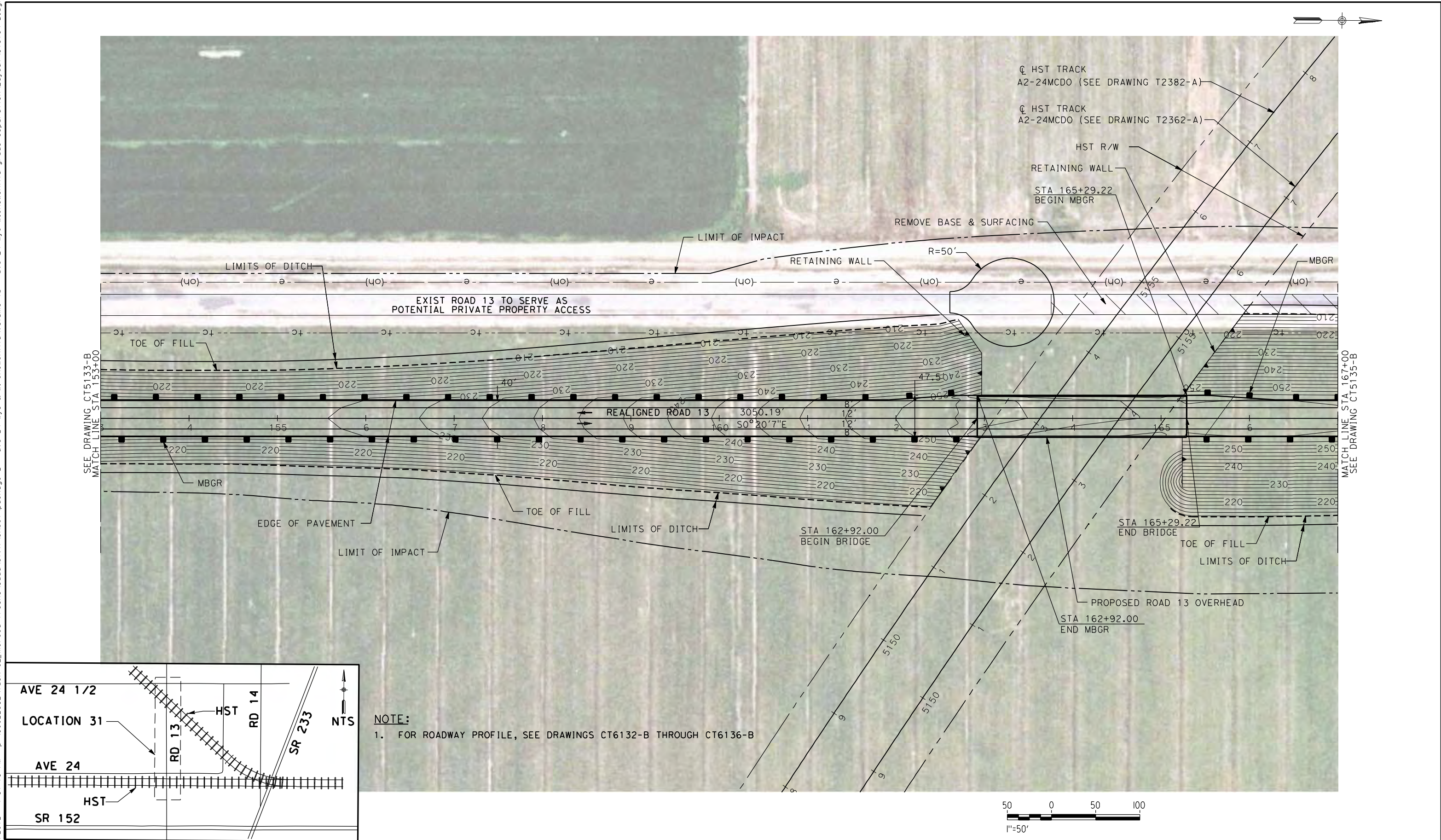
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE/MERCED DO - (WC)  
GRADE SEPARATION - ROAD 13  
LAYOUT  
SHEET 2 OF 5

CONTRACT NO.	HSR06-007
DRAWING NO.	CT5133-B
SCALE	AS SHOWN
SHEET NO.	### OF ###



1/5/2012 1:31:16 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\layout\CT5134-B.dgn

ReyesC1



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6132-B THROUGH CT6136-B

REV	DATE	BY	CHK	APP	DESCRIPTION
1	12/28/11	RG			

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 06/30/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811





**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**

UPRR/SR99 MAINLINE/MERCED DO - (WC)  
GRADE SEPARATION - ROAD 13  
LAYOUT  
SHEET 3 OF 5

CONTRACT NO.  
HSR06-007

DRAWING NO.  
CT5134-B

SCALE  
AS SHOWN

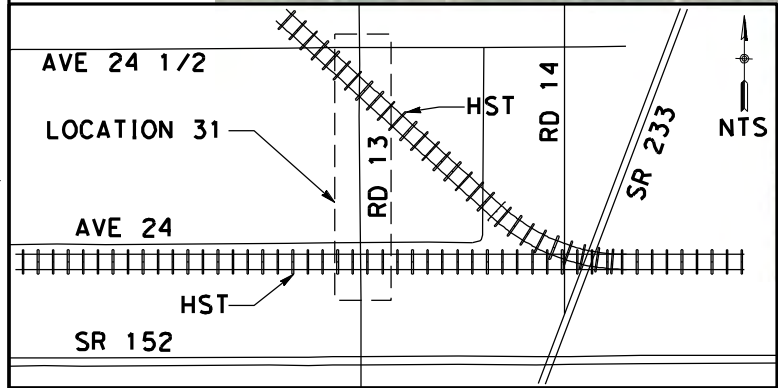
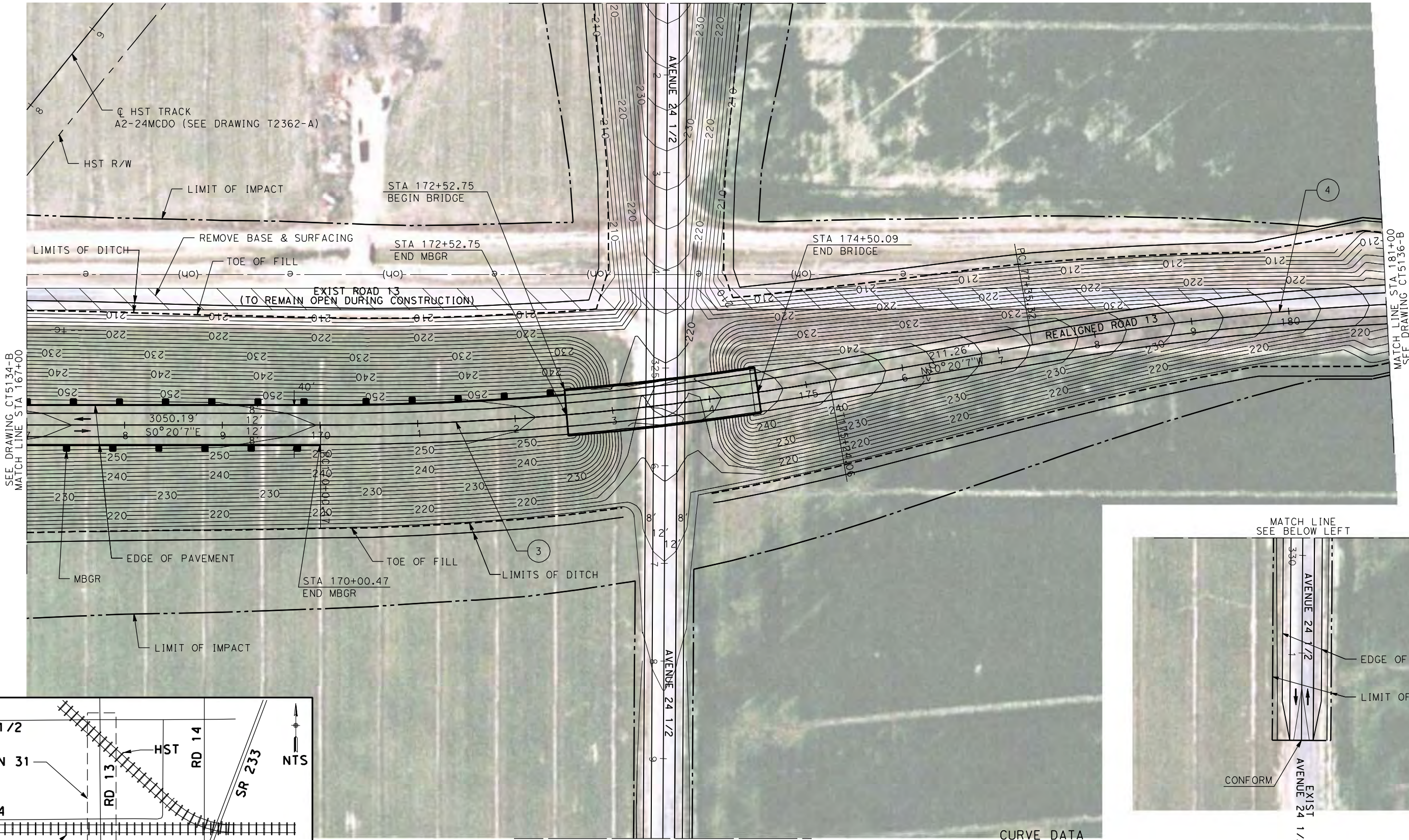
SHEET NO.  
### OF ###



1/5/2012 1:31:42 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\layout\CT5135-B.dgn

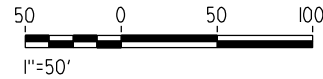
ReyesC1

SEE DRAWING CT5162-B



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6132-B THROUGH CT6136-B

CURVE DATA					
No.	R	$\Delta$	T	L	V
(3)	3000.00	10°00'00"	262.46	523.59	45 MPH
(4)	3000.00	10°01'26"	263.09	524.84	45 MPH

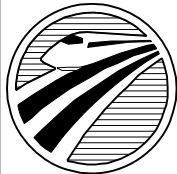


REV	DATE	BY	CHK	APP	DESCRIPTION
1	12/28/11	RG			

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
06/30/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

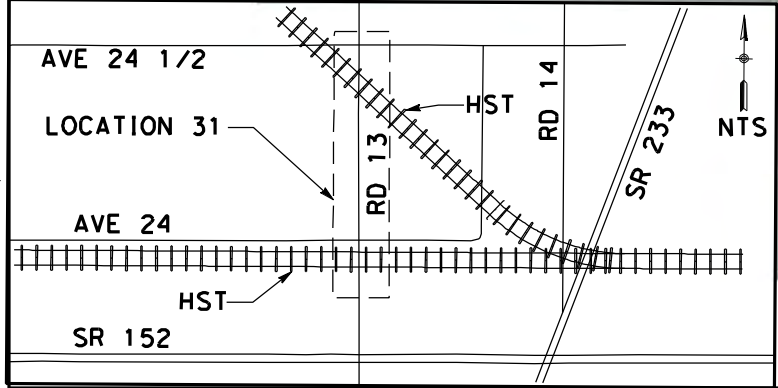
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE/MERCED DO - (WC)  
GRADE SEPARATION - ROAD 13  
LAYOUT  
SHEET 4 OF 5

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5135-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



1/5/2012 1:32:07 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\Layout\CT5136-B.dgn

ReyesC1



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6132-B THROUGH CT6136-B

CURVE DATA					
No.	R	Δ	T	L	V
(4)	3000.00	10° 01' 26"	263.09	524.84	45 MPH

REV	DATE	BY	CHK	APP	DESCRIPTION
1	12/28/11	RG			

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
06/30/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2MHILL**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**

UPRR/SR99 MAINLINE/MERCED DO - (WC)  
GRADE SEPARATION - ROAD 13  
LAYOUT  
SHEET 5 OF 5

CONTRACT NO.  
HSR06-007

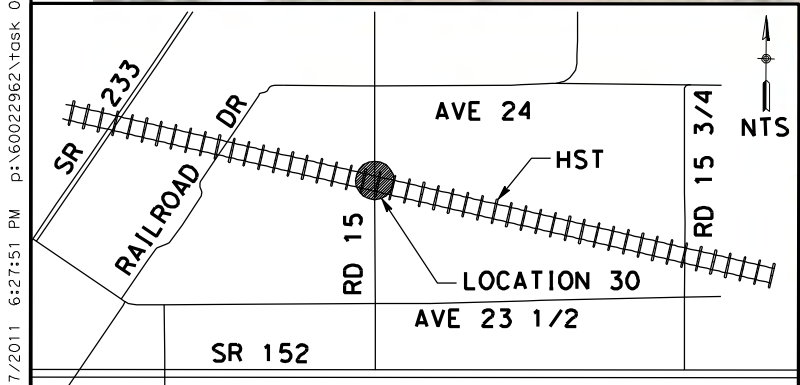
DRAWING NO.  
CT5136-B

SCALE  
AS SHOWN

SHEET NO.  
### OF ###



4/27/2011 6:27:51 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\layout\CT5138-B.dgn



**NOTE:**

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6138-B THROUGH CT6141-B

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**

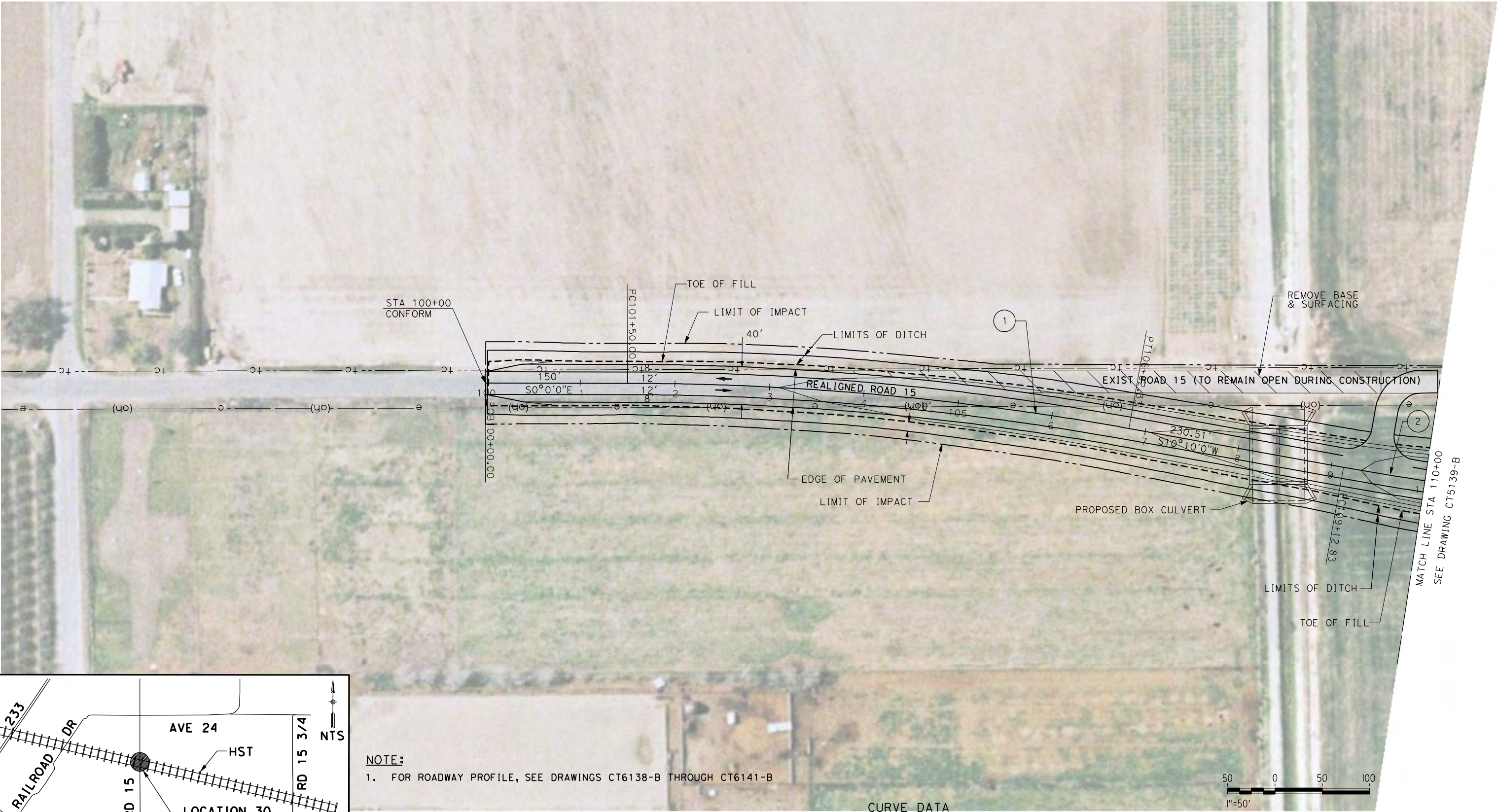


**CALIFORNIA  
HIGH-SPEED RAIL AUTHORITY**

**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**

UPRR/SR99 MAINLINE DO/MERCED DO - (WC)  
GRADE SEPARATION - ROAD 15  
LAYOUT  
SHEET 1 OF 4

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5138-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###

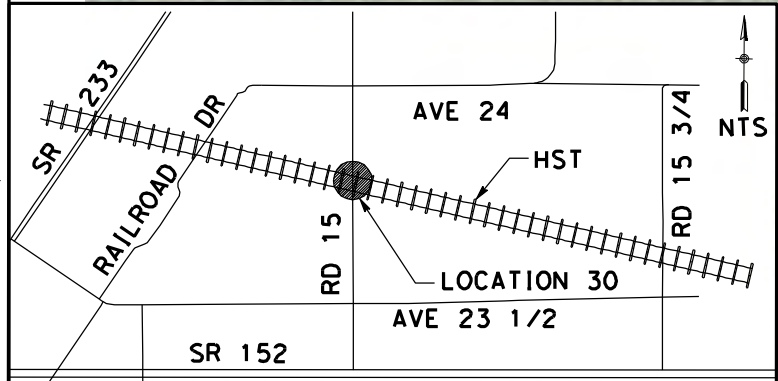
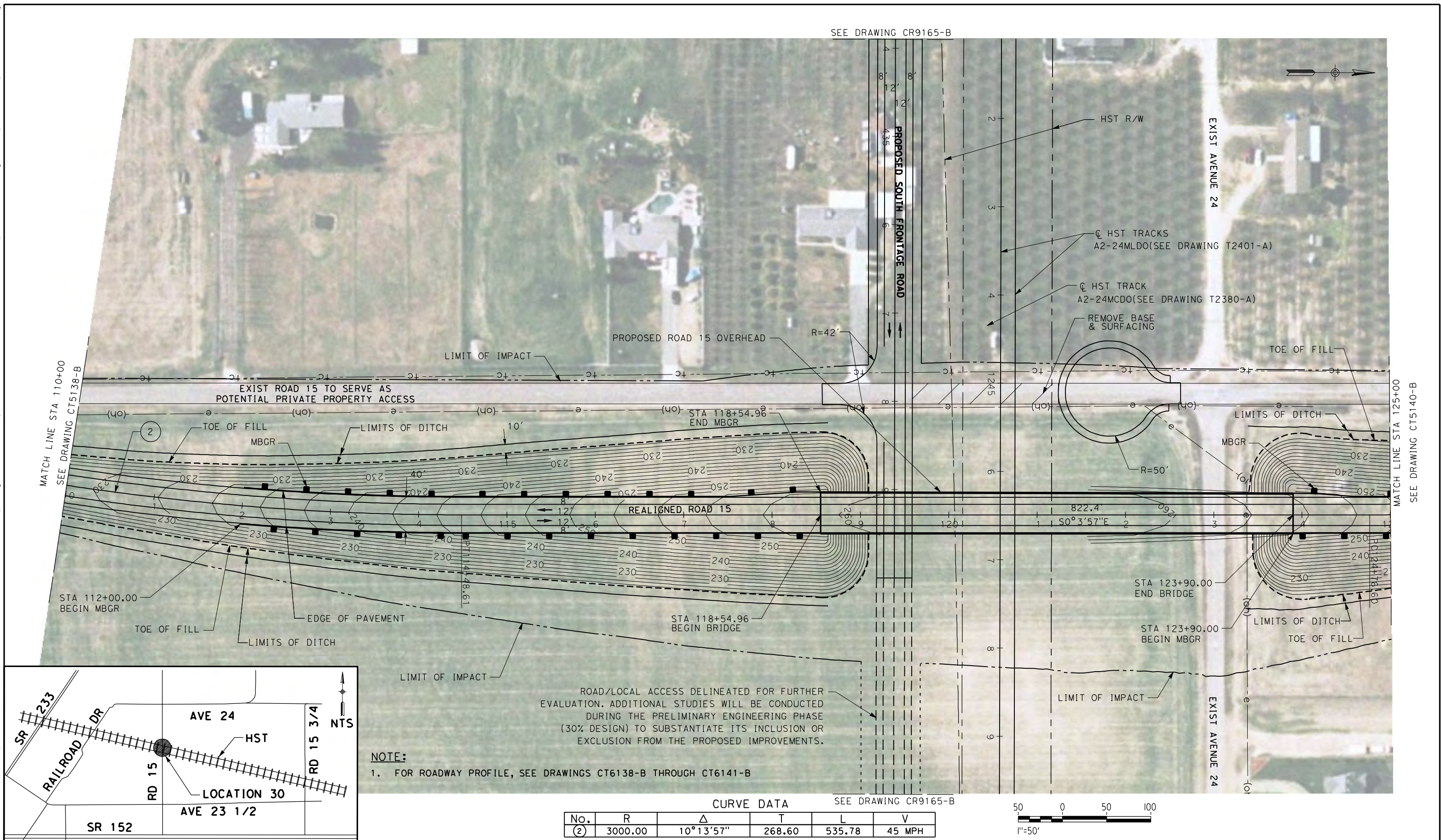


**CURVE DATA**

No.	R	$\Delta$	T	L	V
(1)	3000.00	10°10'00"	266.86	532.33	45 MPH
(2)	3000.00	10°13'57"	268.60	535.78	45 MPH



4/27/2011 6:28:07 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla\grade separation\layout\CT5139-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



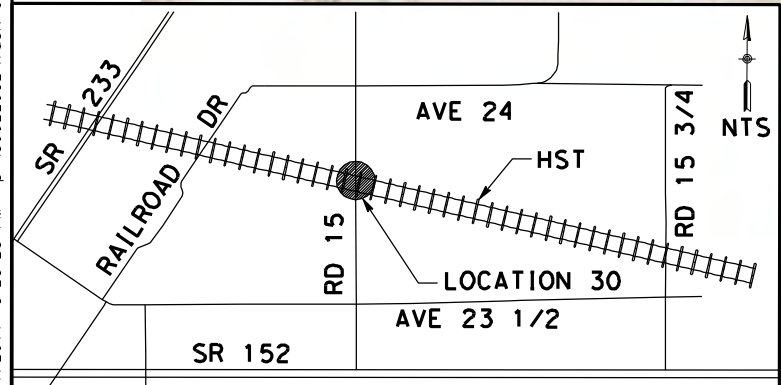
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE DO/MERCED DO - (WC)  
GRADE SEPARATION - ROAD 15  
LAYOUT  
SHEET 2 OF 4

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5139-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 6:28:25 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5140-B.dgn

ReyesC1



**NOTE:**

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6138-B THROUGH CT6141-B

**CURVE DATA**

No.	R	$\Delta$	T	L	V
(3)	3000.00	10°6'3"	265.12	528.88	45 MPH
(4)	3000.00	10°10'0"	266.86	532.33	45 MPH

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**

UPRR/SR99 MAINLINE DO/MERCED DO - (WC)  
GRADE SEPARATION - ROAD 15  
LAYOUT  
SHEET 3 OF 4

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5140-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



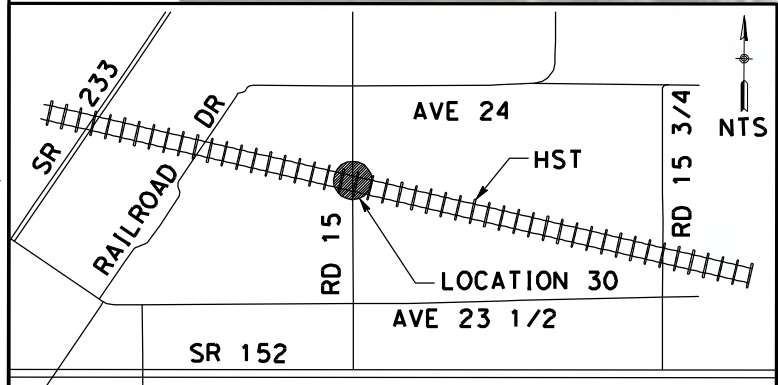
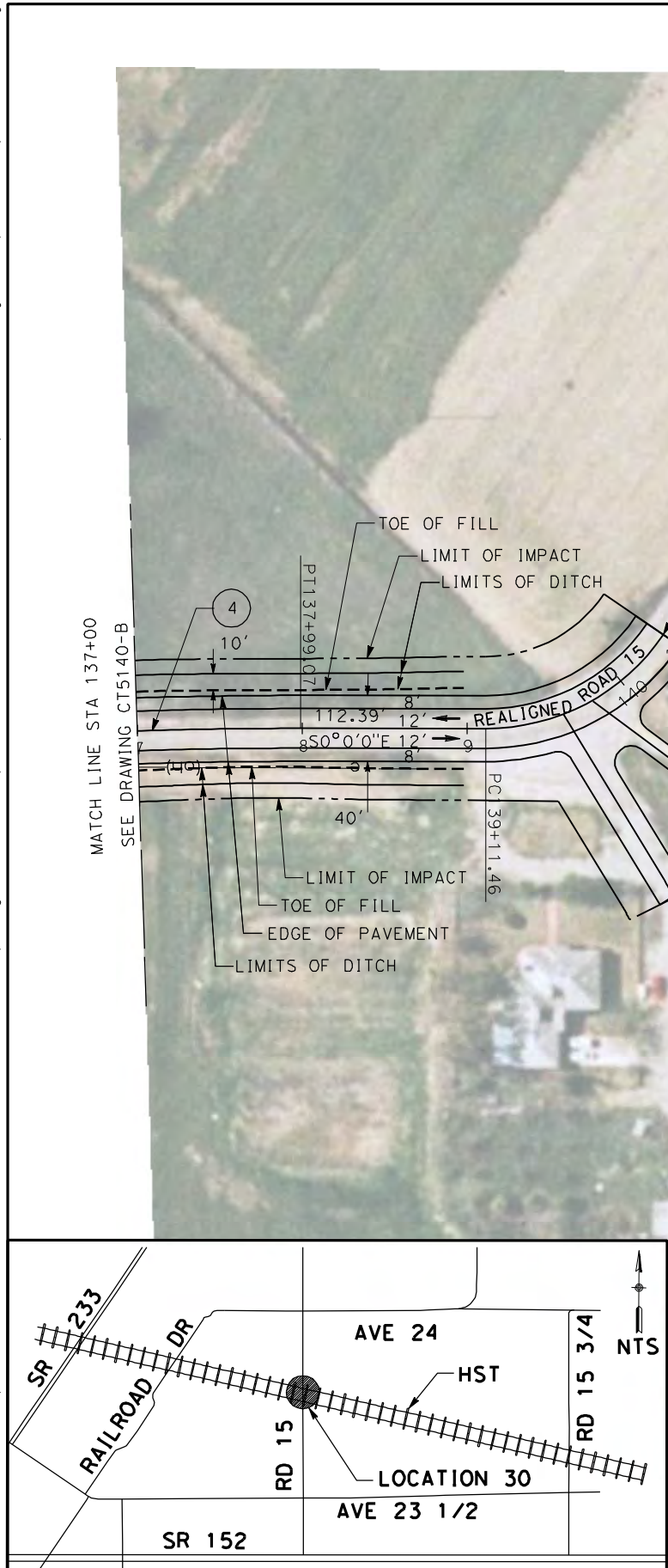
MATCH LINE STA 125+00  
SEE DRAWING CT5139-B

MATCH LINE STA 137+00  
SEE DRAWING CT5141-B





4/27/2011 6:28:40 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\layout\CT5141-B.dgn



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6138-B THROUGH CT6141-B

**CURVE DATA**

No.	R	$\Delta$	T	L	V
(4)	3000.00	10°10'00"	266.86	532.33	45 MPH

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**

UPRR/SR99 MAINLINE DO/MERCED DO - (WC)  
GRADE SEPARATION - ROAD 15  
LAYOUT  
SHEET 4 OF 4

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5141-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



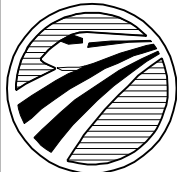


CURVE DATA

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

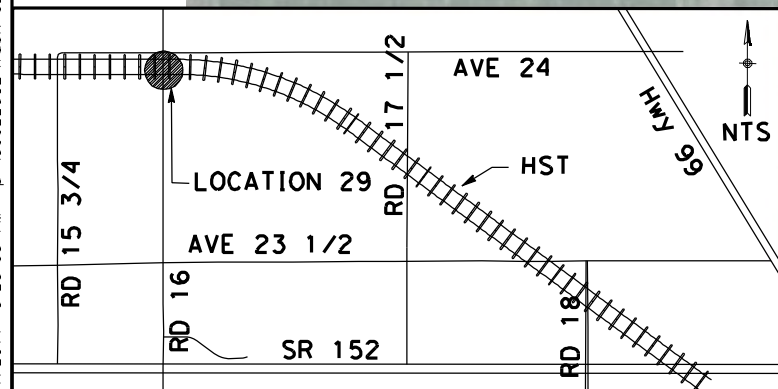
**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

CONTRACT NO.	HSR06-007
DRAWING NO.	CT5142-B
SCALE	AS SHOWN
SHEET NO.	### OF ###





REV	DATE	BY	CHK	APP	DESCRIPTION

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2MHILL**

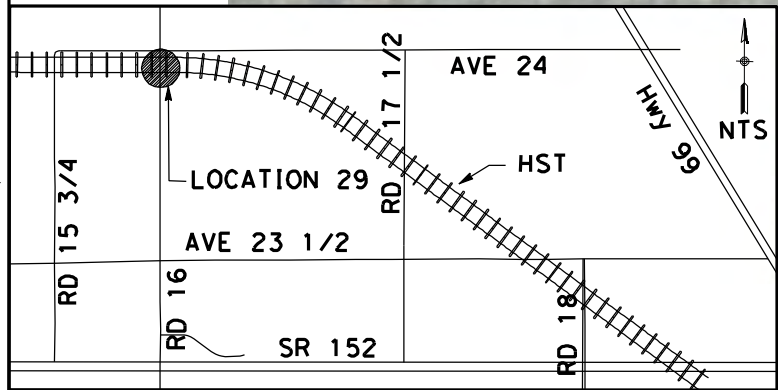


CONTRACT NO.	HSR06-007
DRAWING NO.	CT5143-B
SCALE	AS SHOWN
SHEET NO.	### OF ###

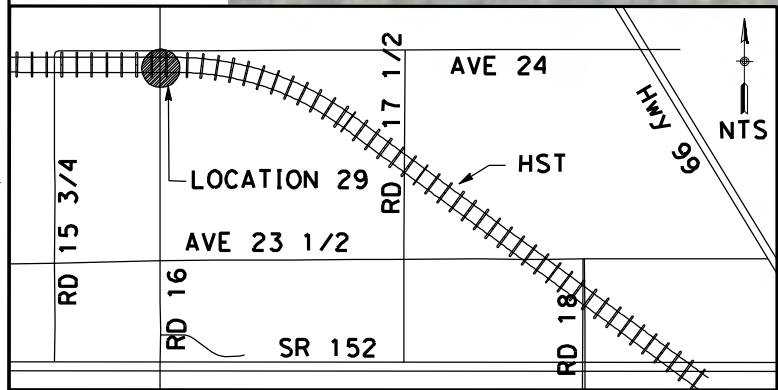


4/27/2011 6:29:23 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\layout\CT5144-B.dgn

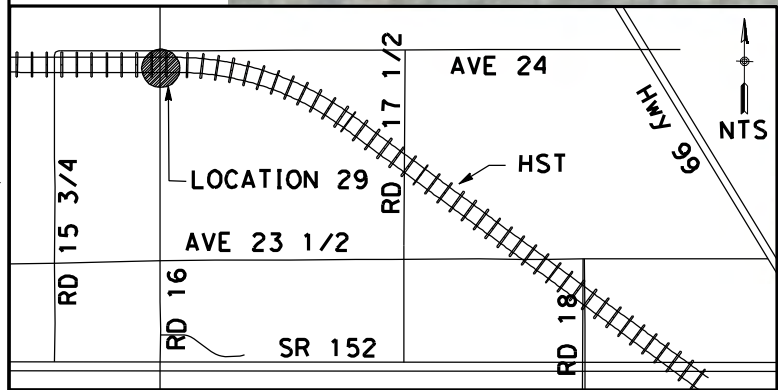
ReyesC1



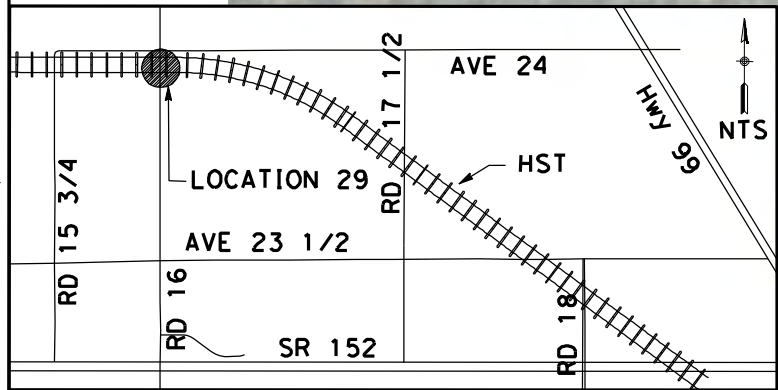
REV	DATE	BY	CHK	APP	DESCRIPTION



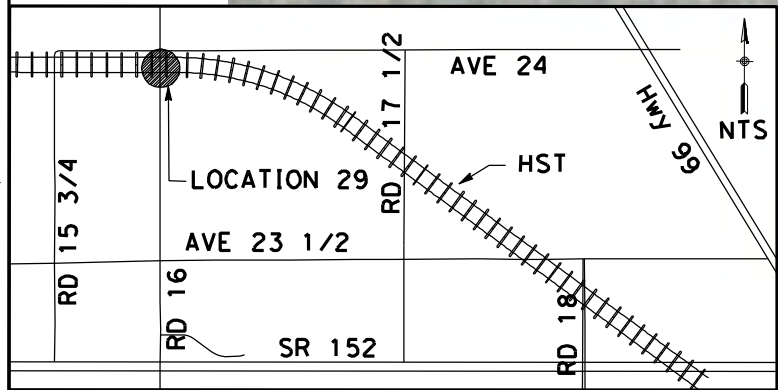
REV	DATE	BY	CHK	APP	DESCRIPTION



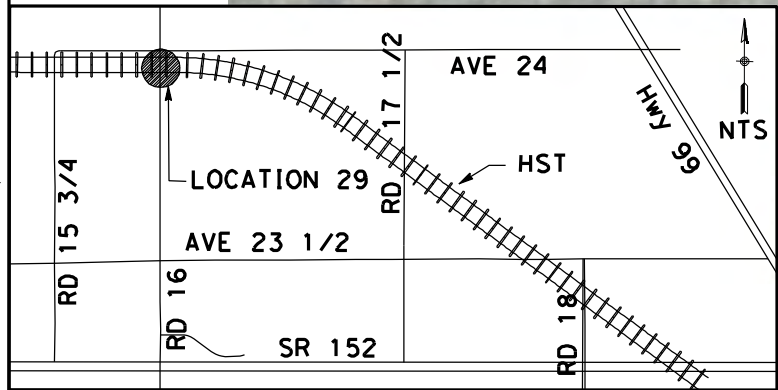
REV	DATE	BY	CHK	APP	DESCRIPTION



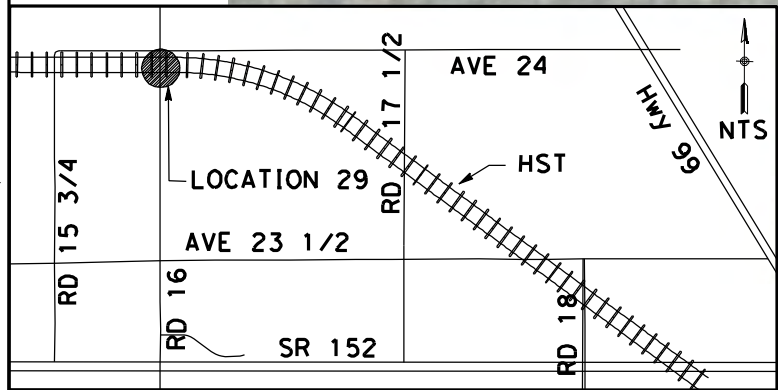
REV	DATE	BY	CHK	APP	DESCRIPTION



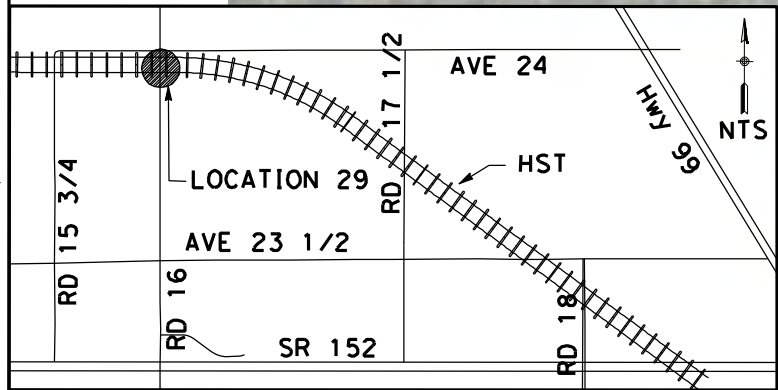
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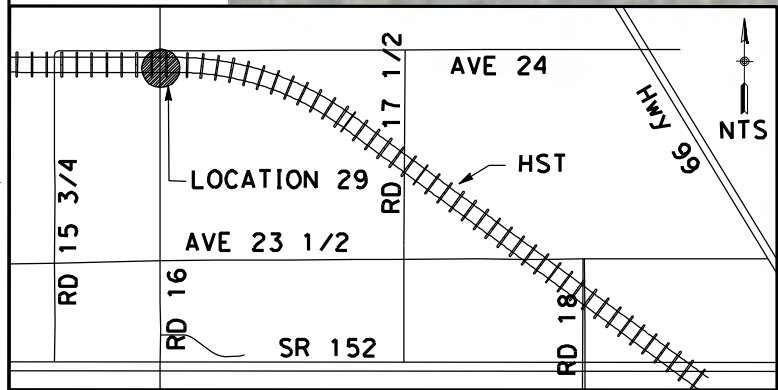
REV	DATE	BY	CHK	APP	DESCRIPTION



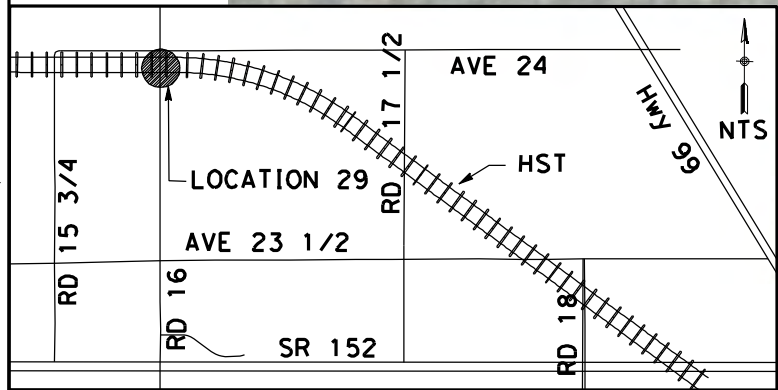
REV	DATE	BY	CHK	APP	DESCRIPTION



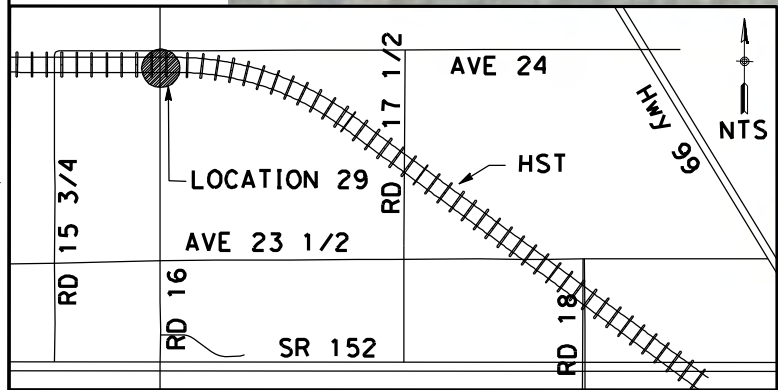
REV	DATE	BY	CHK	APP	DESCRIPTION



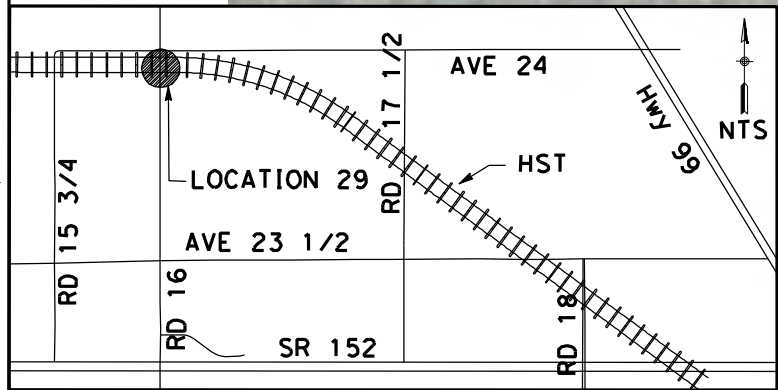
REV	DATE	BY	CHK	APP	DESCRIPTION



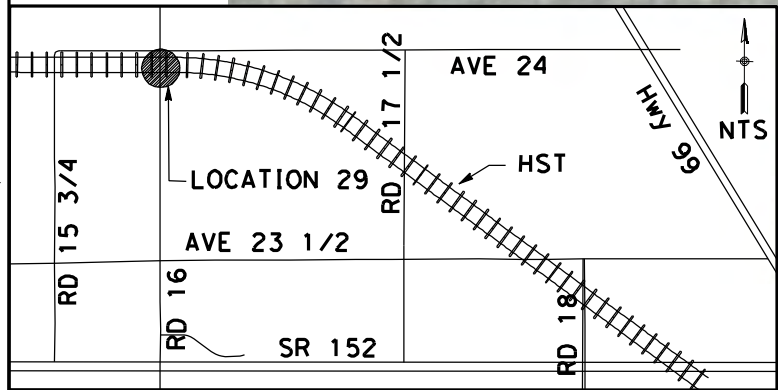
REV	DATE	BY	CHK	APP	DESCRIPTION



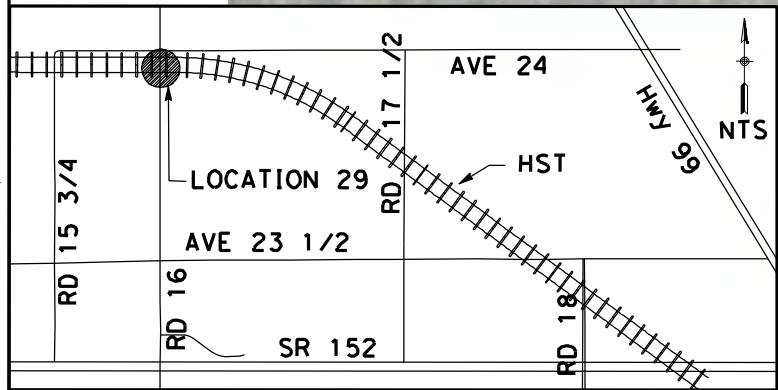
REV	DATE	BY	CHK	APP	DESCRIPTION



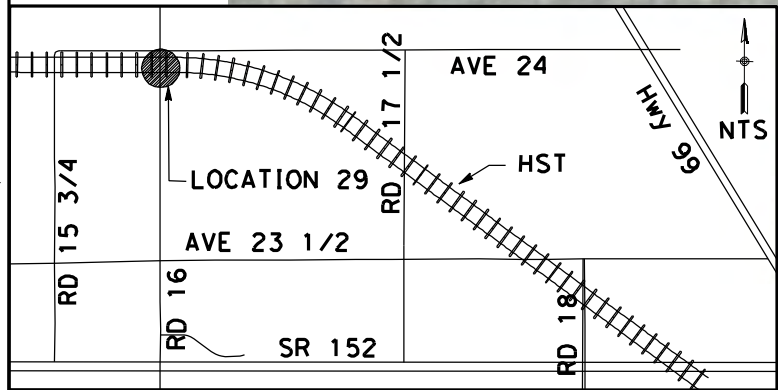
REV	DATE	BY	CHK	APP	DESCRIPTION



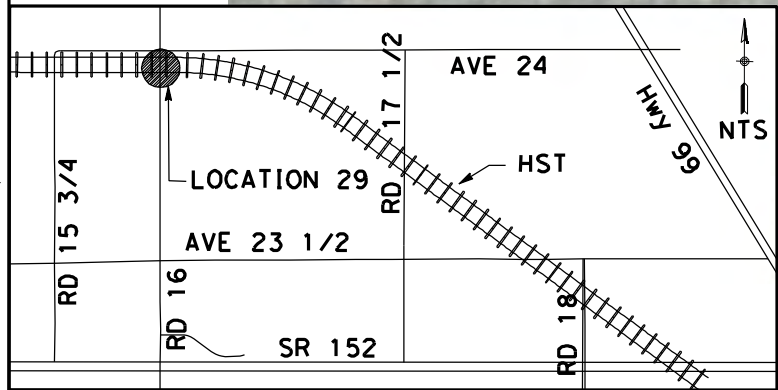
REV	DATE	BY	CHK	APP	DESCRIPTION



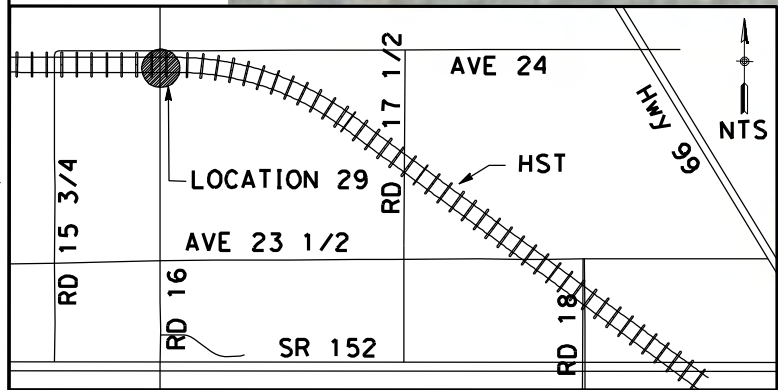
REV	DATE	BY	CHK	APP	DESCRIPTION



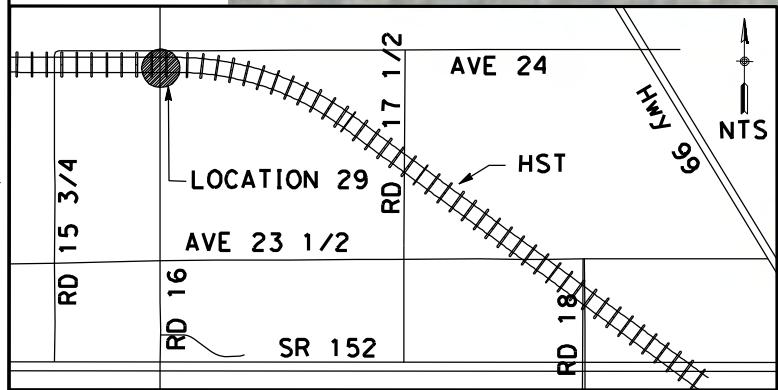
REV	DATE	BY	CHK	APP	DESCRIPTION



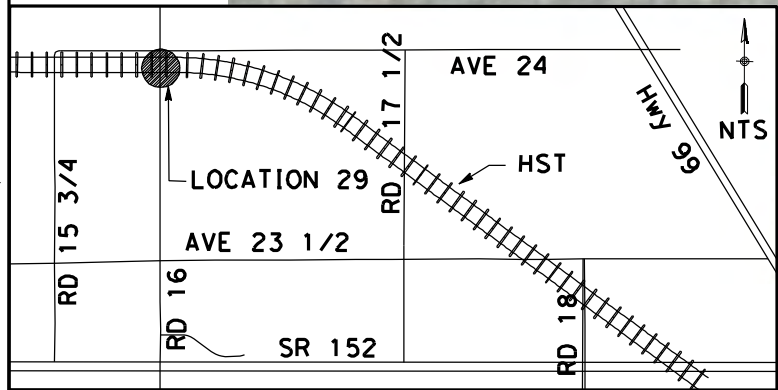
REV	DATE	BY	CHK	APP	DESCRIPTION



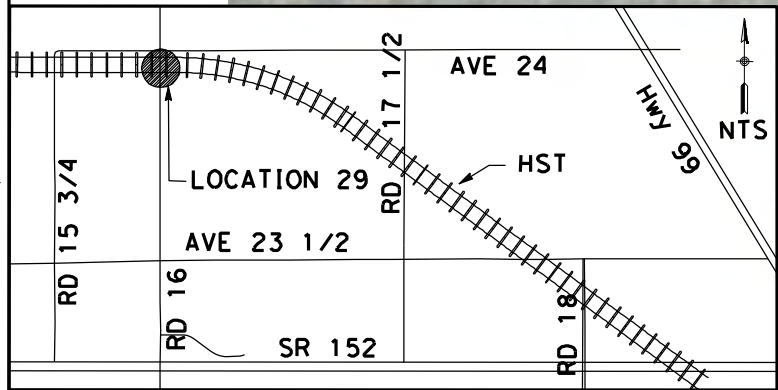
REV	DATE	BY	CHK	APP	DESCRIPTION



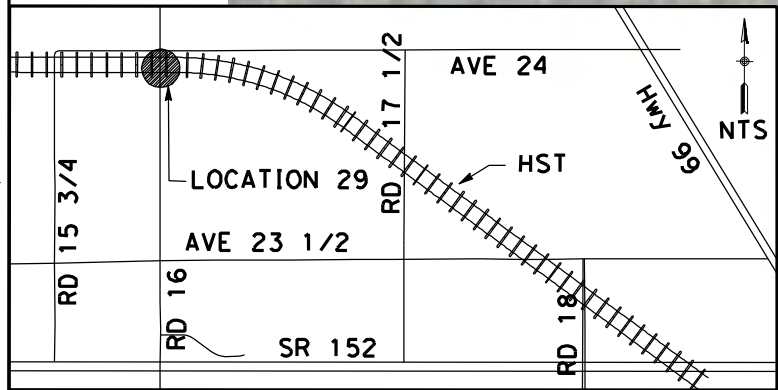
REV	DATE	BY	CHK	APP	DESCRIPTION



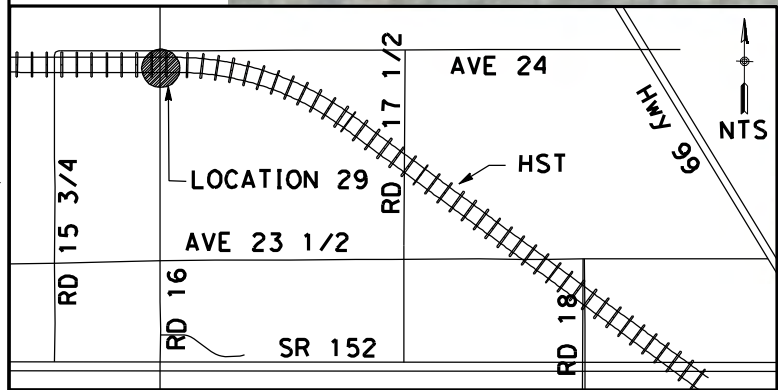
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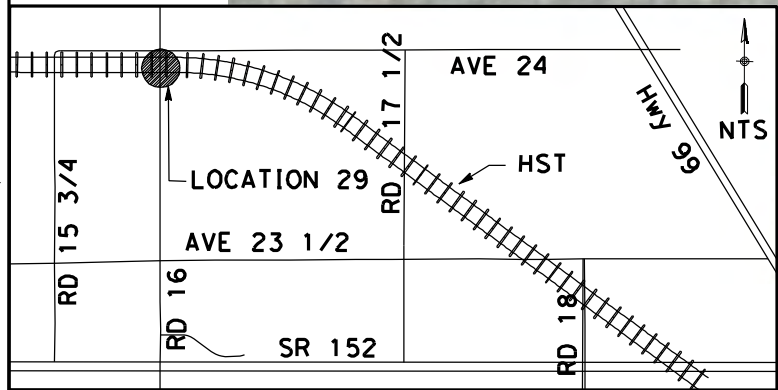
REV	DATE	BY	CHK	APP	DESCRIPTION



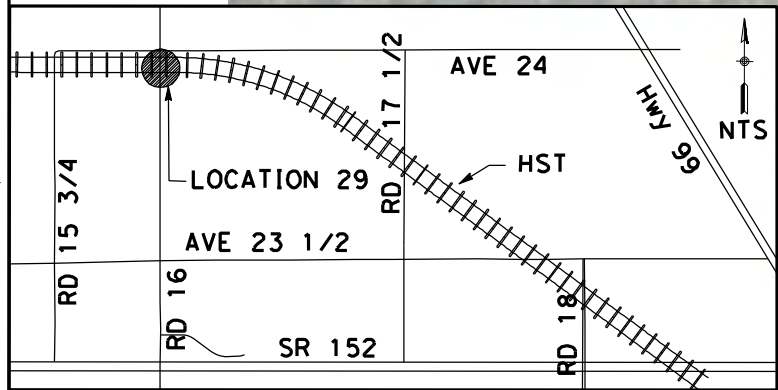
REV	DATE	BY	CHK	APP	DESCRIPTION



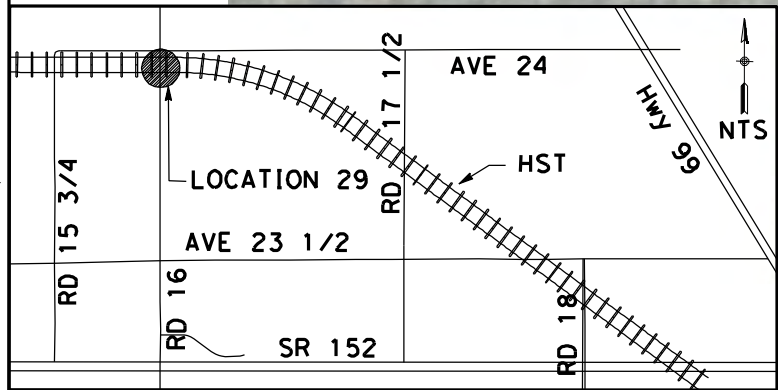
REV	DATE	BY	CHK	APP	DESCRIPTION



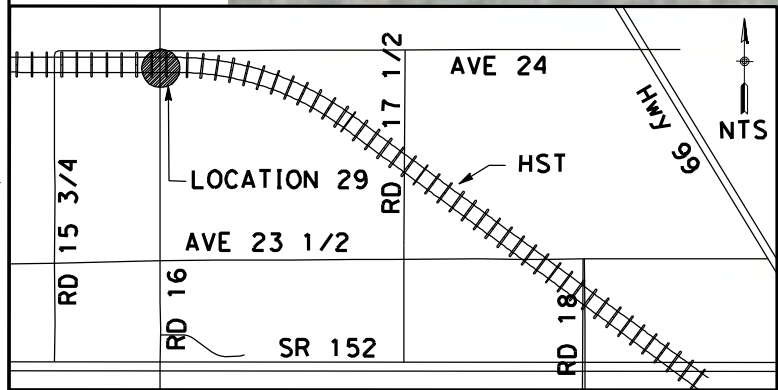
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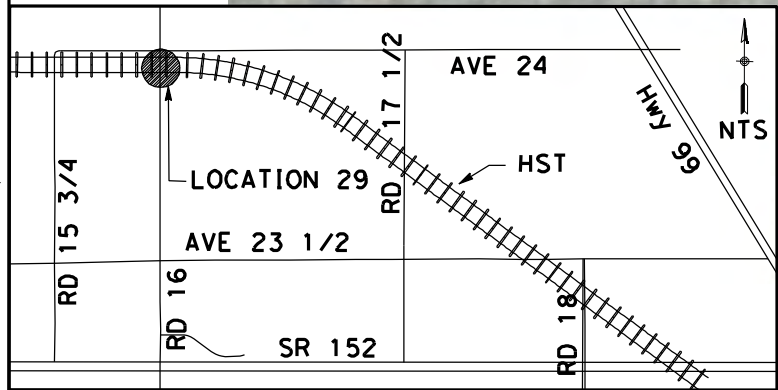
REV	DATE	BY	CHK	APP	DESCRIPTION



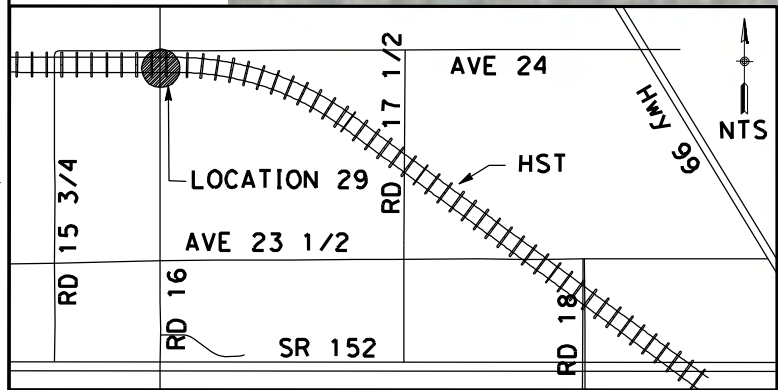
REV	DATE	BY	CHK	APP	DESCRIPTION



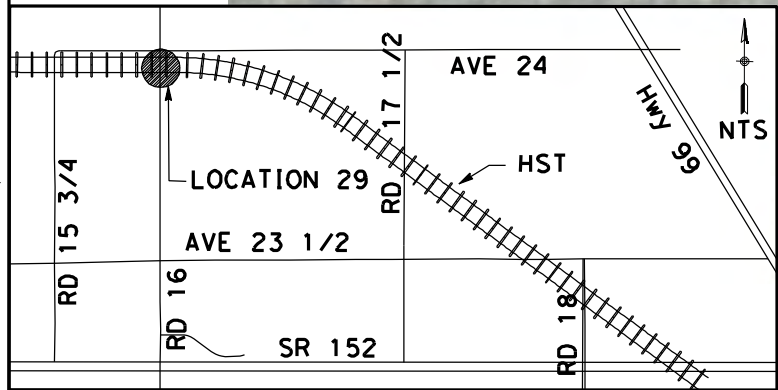
REV	DATE	BY	CHK	APP	DESCRIPTION



REV	DATE	BY	CHK	APP	DESCRIPTION



REV	DATE	BY	CHK	APP	DESCRIPTION

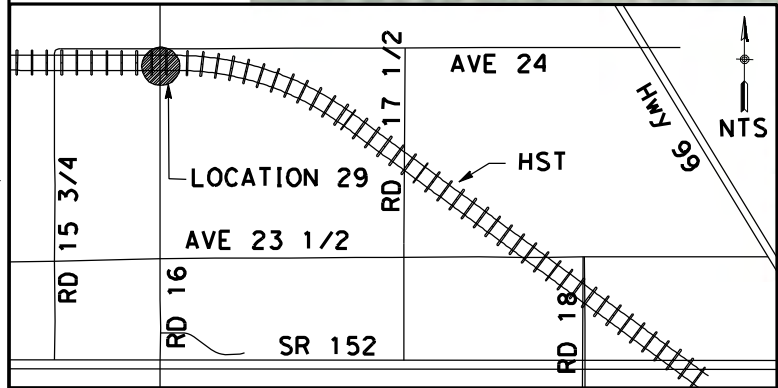


REV	DATE	BY	CHK	APP	DESCRIPTION



4/27/2011 6:29:38 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\layout\CT5145-B.dgn

ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

NOTE:  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6142-B THROUGH CT6145-B

CURVE DATA					
No.	R	Δ	T	L	V
③	3000.00	9°32'57"	250.58	500.00	45 MPH
④	3000.00	8°38'08"	226.51	452.16	45 MPH

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

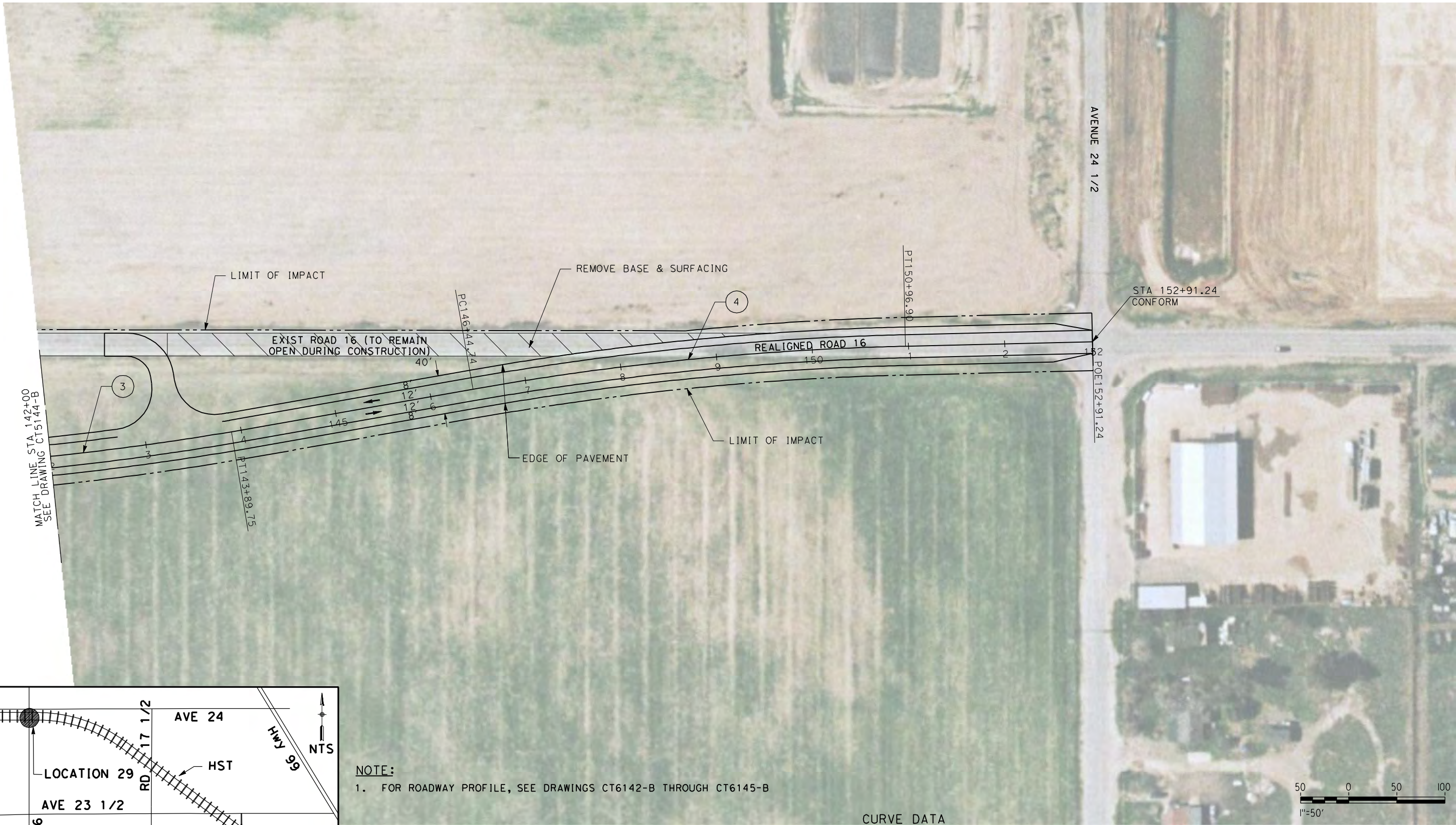
RECORD SET  
15% DESIGN  
SUBMITTAL  
  
NOT FOR  
CONSTRUCTION

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPRR/SR99 MAINLINE DO - (WC)  
GRADE SEPARATION - ROAD 16  
LAYOUT  
SHEET 4 OF 4

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5145-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###







REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY	D. AYELE
DRAWN BY	C. DELOS REYES
CHECKED BY	A. SILVER
IN CHARGE	A. BOONE
DATE	04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**



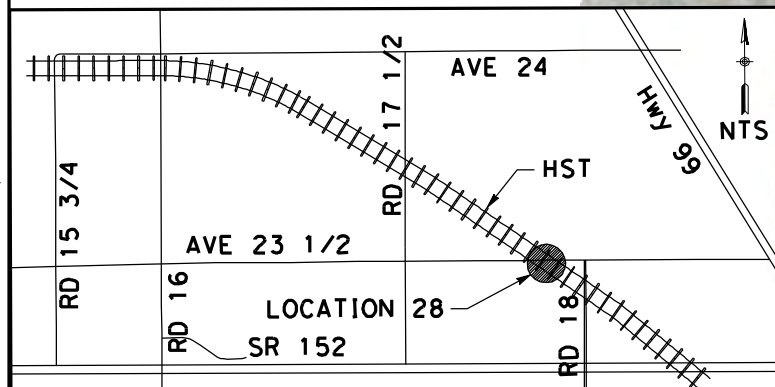
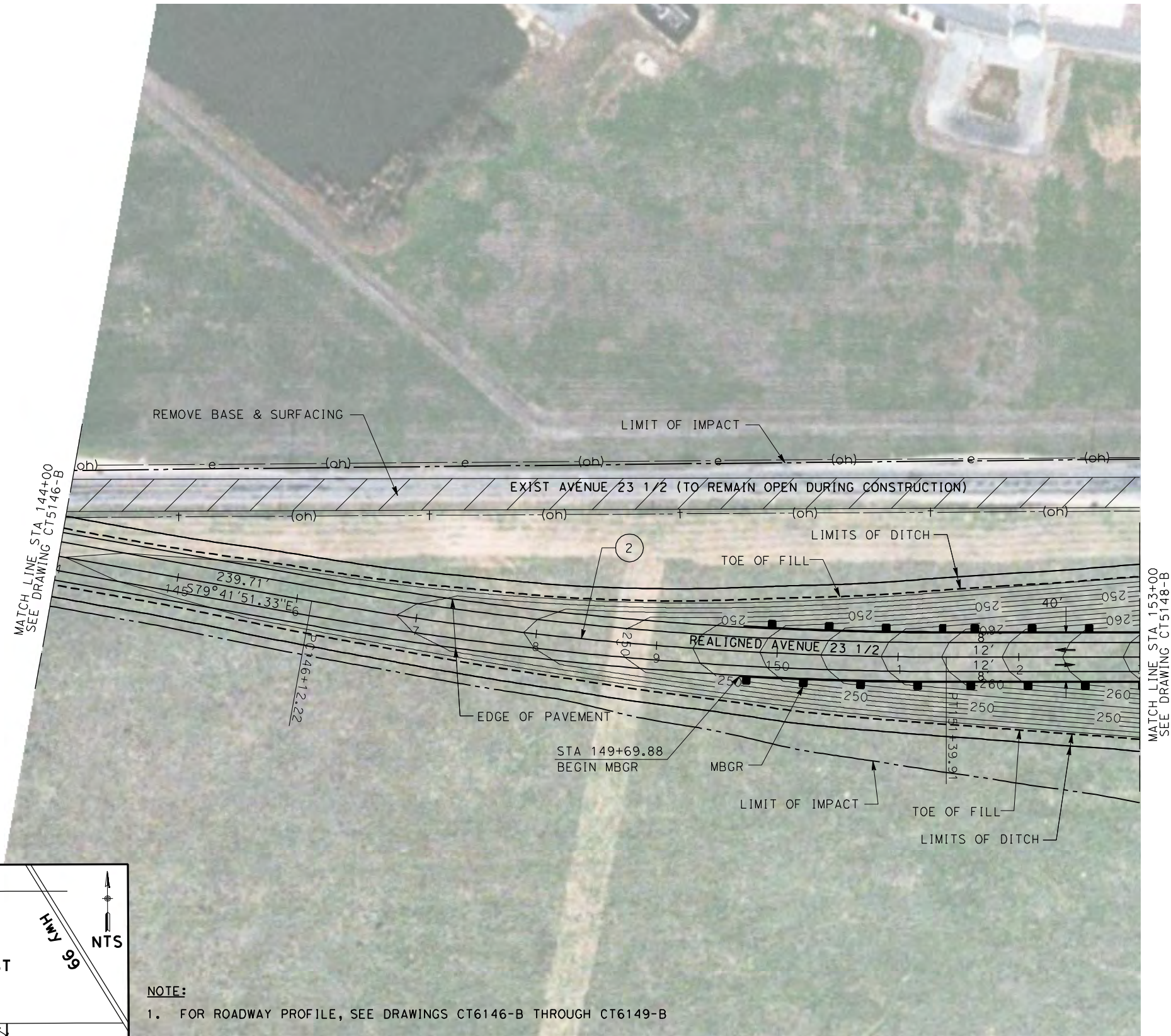
**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

## CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

UPRR/SR99 MAINLINE DO - (WC)  
GRADE SEPARATION - AVENUE 23 1/2  
LAYOUT  
SHEET 1 OF 4

CONTRACT NO. HSR06-007
DRAWING NO. CT5146-B
SCALE AS SHOWN
SHEET NO. ### OF ###





**NOTE:**

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6146-B THROUGH CT6149-B

CURVE DATA					
No.	R	$\Delta$	T	L	V
(2)	3000.00	10°04'41"	264.53	527.69	45 MPH

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

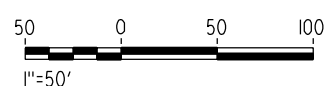
**CH2MHILL**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE DO - (WC)  
GRADE SEPARATION - AVENUE 23 1/2  
LAYOUT  
SHEET 2 OF 4

CONTRACT NO.	HSR06-007
DRAWING NO.	CT5147-B
SCALE	AS SHOWN
SHEET NO.	### OF ###





REV	DATE	BY	CHK	APP	DESCRIPTION

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

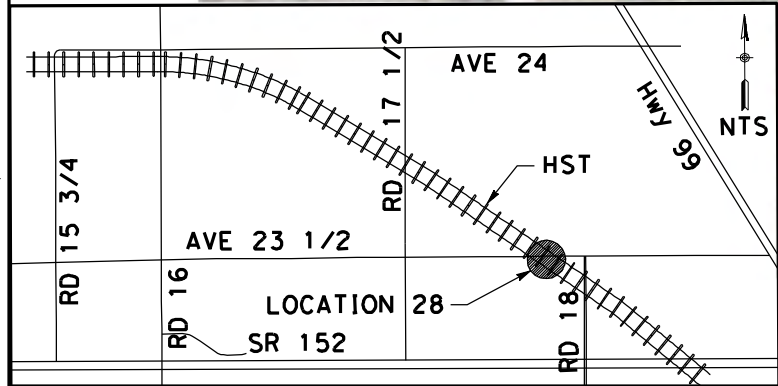
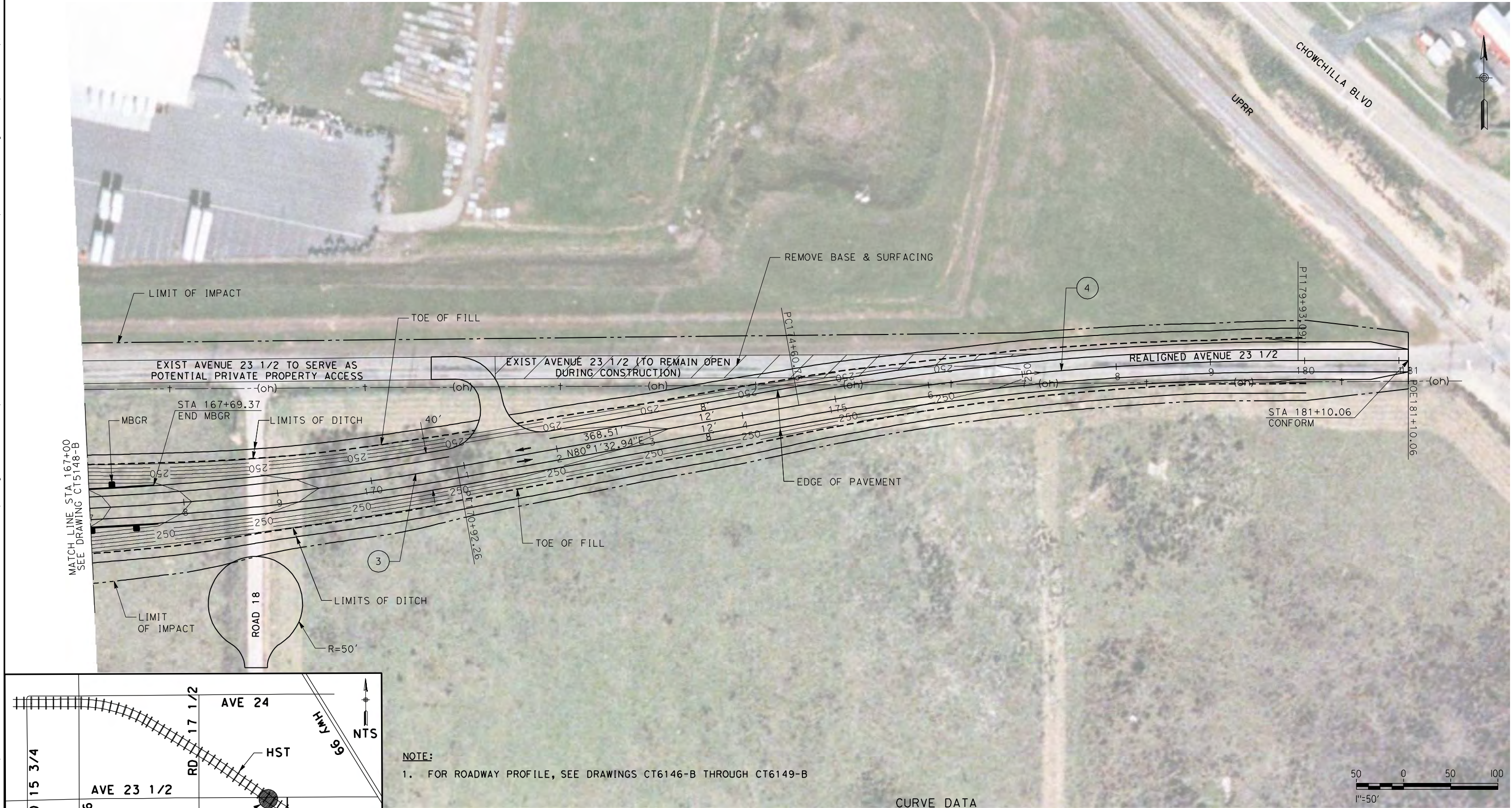
**CH2MHILL**



CONTRACT NO.	HSR06-007
DRAWING NO.	CT5148-B
SCALE	AS SHOWN
SHEET NO.	### OF ###



4/27/2011 6:30:35 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5149-B.dgn



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6146-B THROUGH CT6149-B

**CURVE DATA**

No.	R	$\Delta$	T	L	V
③	3000.00	10°11'55"	267.70	533.99	45 MPH
④	3000.00	10°10'00"	266.86	532.33	45 MPH

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

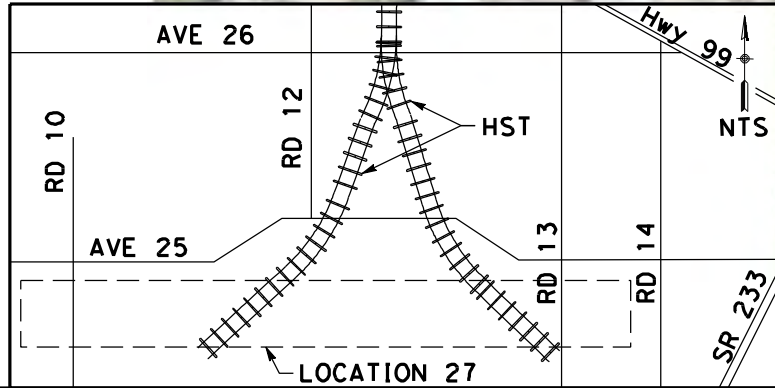
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE DO - (WC)  
GRADE SEPARATION - AVENUE 23 1/2  
LAYOUT  
SHEET 4 OF 4

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5149-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



1/5/2012 1:32:17 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\layout\CT5151-B.dgn

ReyesC1



**NOTE:**

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6151-B THROUGH CT6163-B

CURVE DATA					
No.	R	$\Delta$	T	L	V
(1)	3500.00	44°36'04"	1435.49	2724.52	55 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION
1	12/28/11	RG			

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
06/30/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**

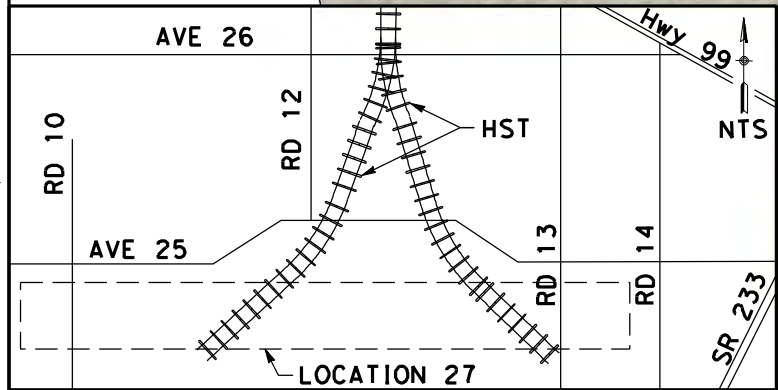
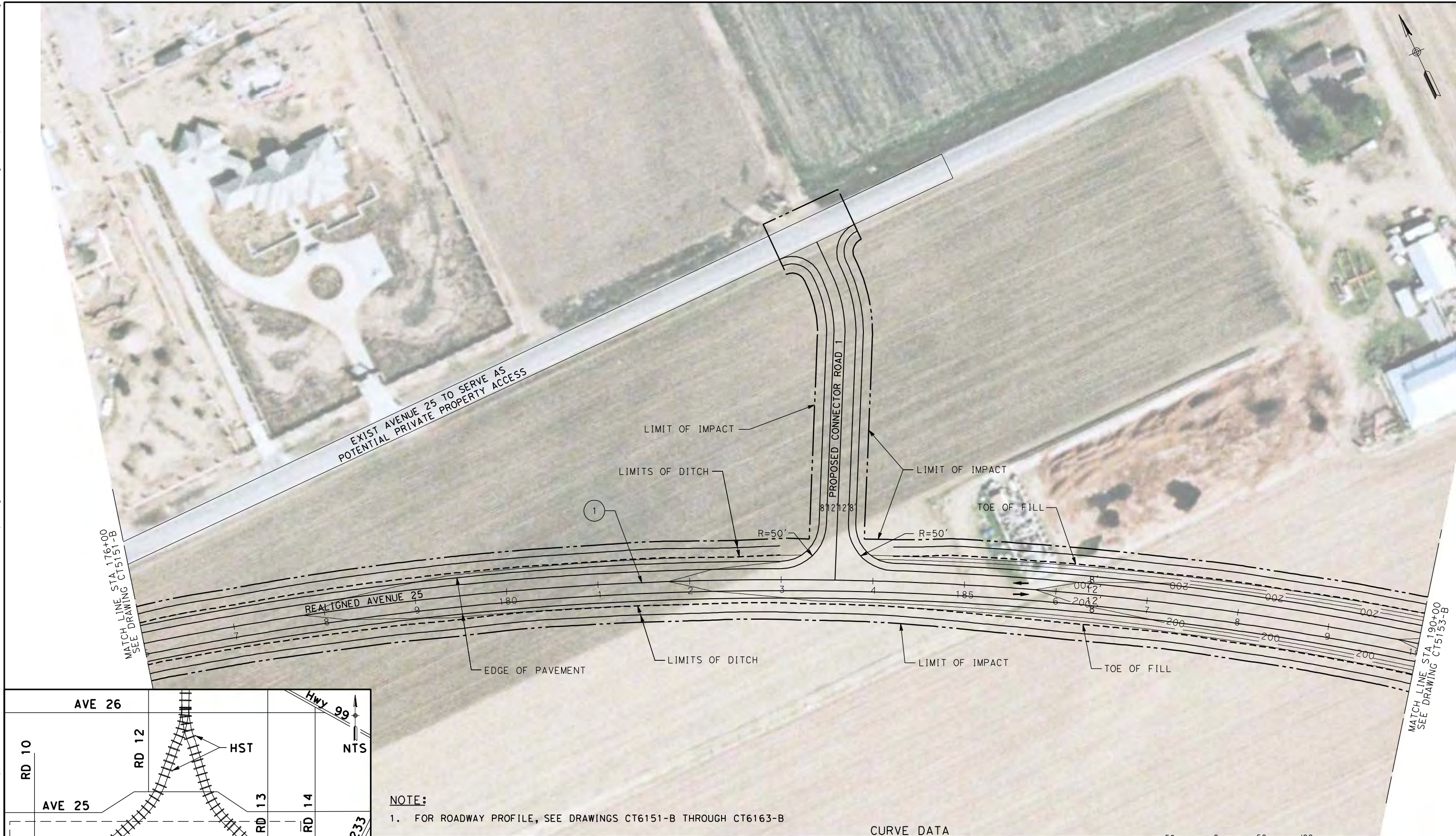
UPRR/SR99 WYE/MERCED DO - (WC)  
GRADE SEPARATION - AVENUE 25  
LAYOUT  
SHEET 1 OF 12

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5151-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



1/5/2012 1:32:27 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\layout\CT5152-B.dgn

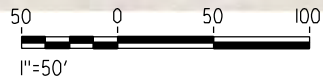
ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION
1	12/28/11	RG			

NOTE:  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6151-B THROUGH CT6163-B

CURVE DATA				
No.	R	$\Delta$	T	L
(1)	3500.00	44°36'04"	1435.49	2724.52



DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
06/30/2011

RECORD SET  
15% DESIGN  
SUBMITTAL  
  
NOT FOR  
CONSTRUCTION

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPRR/SR99 WYE/MERCED DO - (WC)  
GRADE SEPARATION - AVENUE 25  
LAYOUT  
SHEET 2 OF 12

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5152-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###





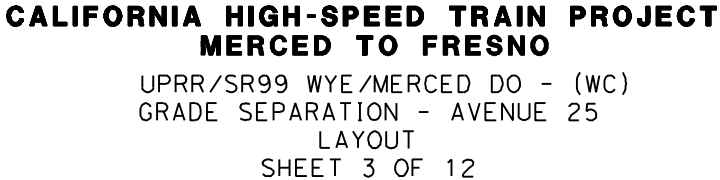
**NOTE:**  
1. FOR ROADWAY

SEE DRAWING CR9155-B

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 06/30/2011

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2MHILL**

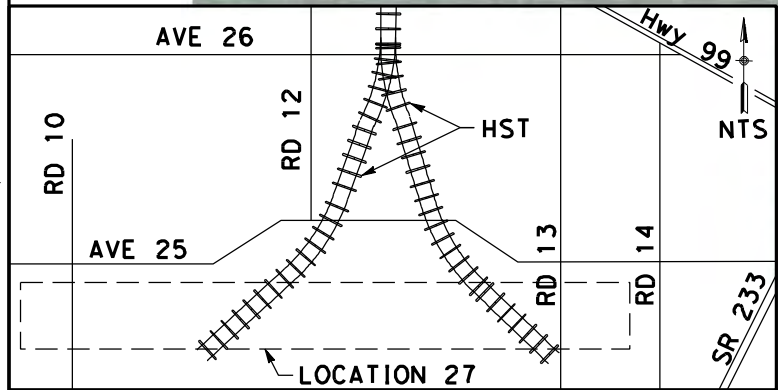


CONTRACT NO.	HSR06-007
DRAWING NO.	CT5153-B
SCALE	AS SHOWN
SHEET NO.	### OF ###



1/5/2012 1:32:48 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\layout\CT5154-B.dgn

ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION
1	12/28/11	RG			

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
06/30/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 WYE/MERCED DO - (WC)  
GRADE SEPARATION - AVENUE 25  
LAYOUT  
SHEET 4 OF 12

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5154-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###

**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6151-B THROUGH CT6163-B

ROAD/LOCAL ACCESS DELINEATED FOR FURTHER  
EVALUATION. ADDITIONAL STUDIES WILL BE CONDUCTED  
DURING THE PRELIMINARY ENGINEERING PHASE  
(30% DESIGN) TO SUBSTANTIATE ITS INCLUSION OR  
EXCLUSION FROM THE PROPOSED IMPROVEMENTS.

**CURVE DATA**

No.	R	$\Delta$	T	L	V
(2)	3500.00	44°19'33"	1425.68	2707.71	55 MPH

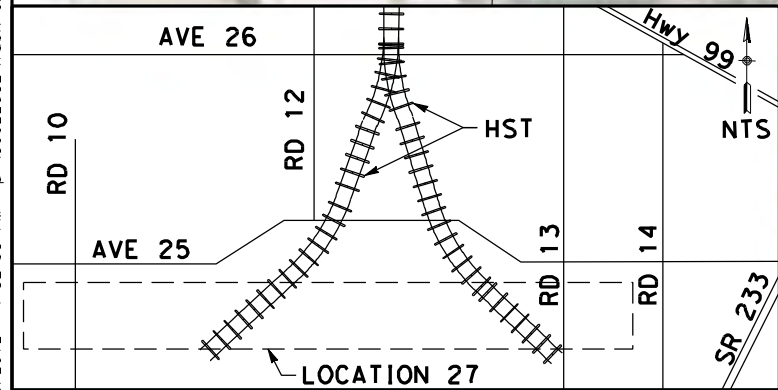
SEE DRAWING CR9155-B





1/5/2012 1:32:58 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\layout\CT5155-B.dgn

ReyesC1



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6151-B THROUGH CT6163-B

CURVE DATA				
No.	R	$\Delta$	T	L
(2)	3500.00	44°19'33"	1425.68	2707.71
				V
				55 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION
1	12/28/11	RG			

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
06/30/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



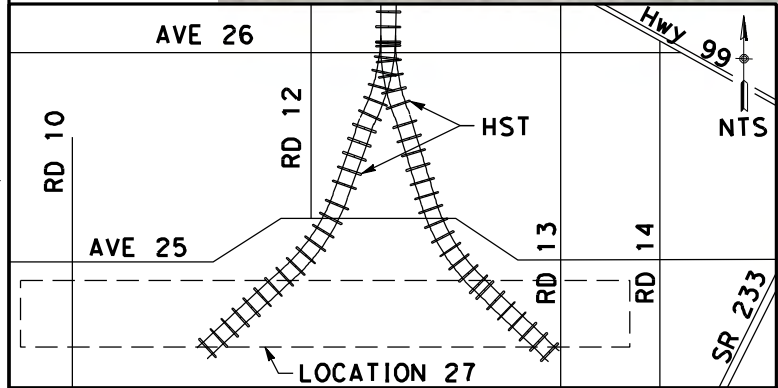
**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 WYE/MERCED DO - (WC)  
GRADE SEPARATION - AVENUE 25  
LAYOUT  
SHEET 5 OF 12

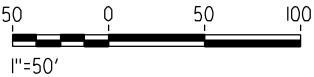
CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5155-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



1/5/2012 1:33:08 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\layout\CT5156-B.dgn



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6151-B THROUGH CT6163-B



REV	DATE	BY	CHK	APP	DESCRIPTION
1	12/28/11	RG			

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
06/30/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



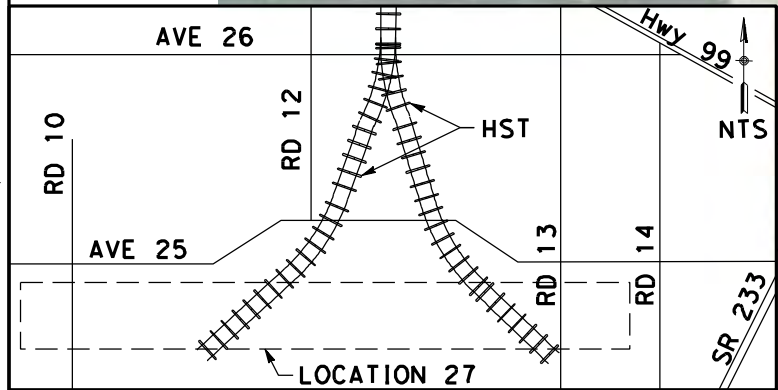
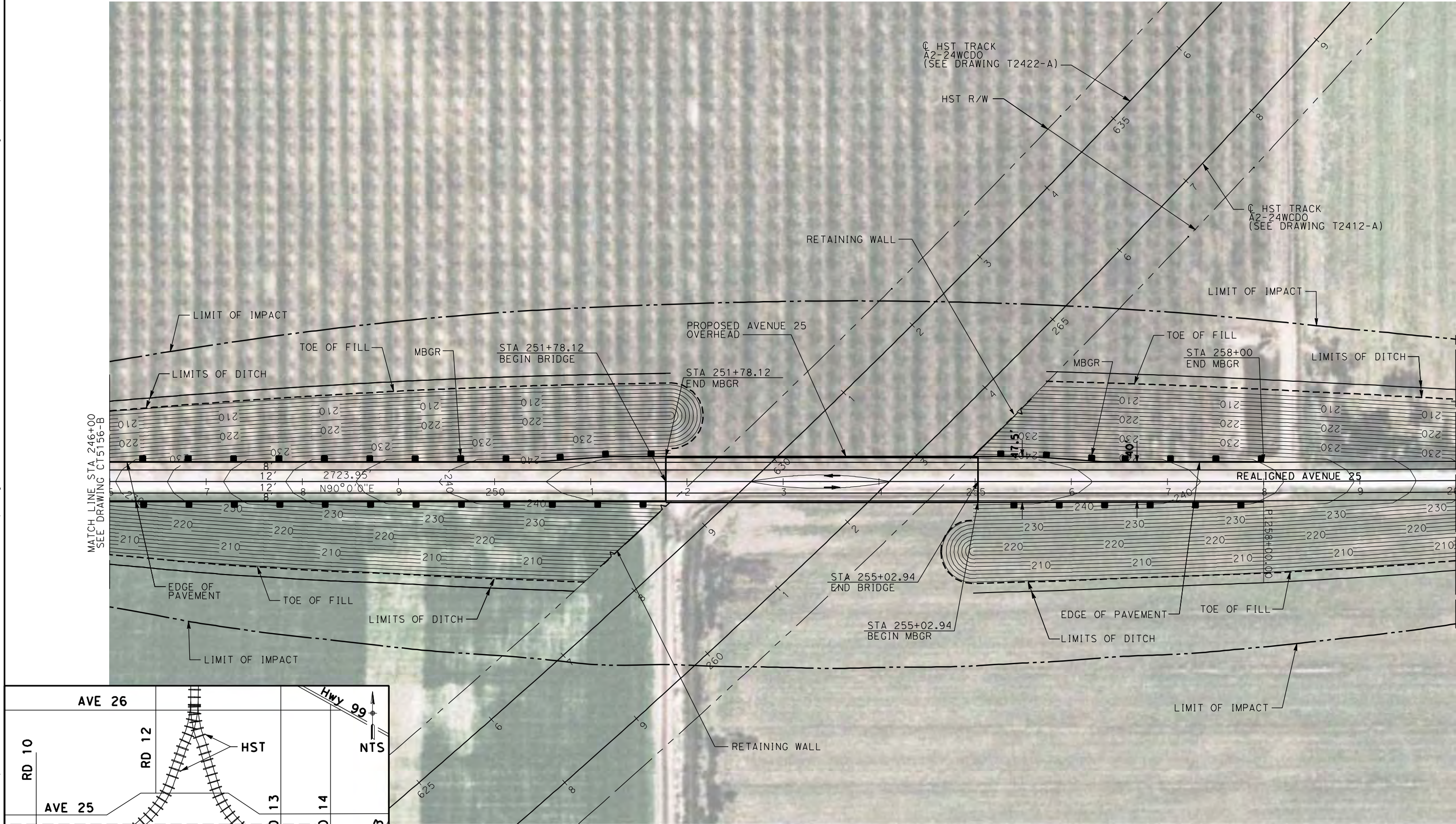
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 WYE/MERCED DO - (WC)  
GRADE SEPARATION - AVENUE 25  
LAYOUT  
SHEET 6 OF 12

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5156-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



1/5/2012 1:33:18 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\layout\CT5157-B.dgn

ReyesC1



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6151-B THROUGH CT6163-B



REV	DATE	BY	CHK	APP	DESCRIPTION
1	12/28/11	RG			

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
06/30/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**

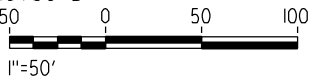


**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPRR/SR99 WYE/MERCED DO - (WC)  
GRADE SEPARATION - AVENUE 25  
LAYOUT  
SHEET 7 OF 12

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5157-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###





1	12/28/11	RG			
REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY	D. AYELE
DRAWN BY	C. DELOS REYES
CHECKED BY	A. SILVER
IN CHARGE	A. BOONE
DATE	06/30/2011

**NOT FOR  
CONSTRUCTION**

**CH2MHILL**



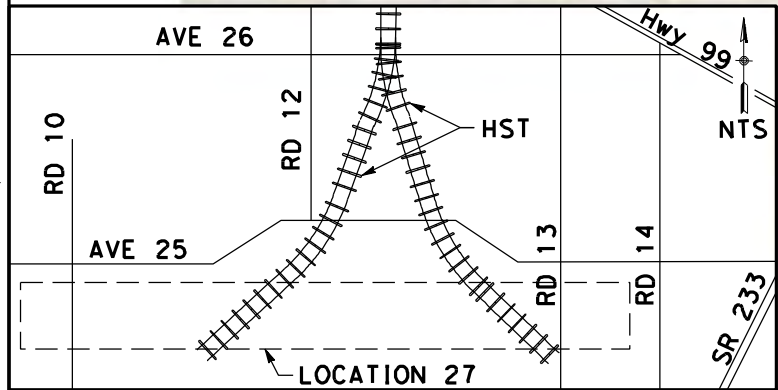
UPRR/SR99 WYE/MERCED DO - (WC)  
GRADE SEPARATION - AVENUE 25  
LAYOUT  
SHEET 8 OF 12

SHEET NO.         
#### OF ####

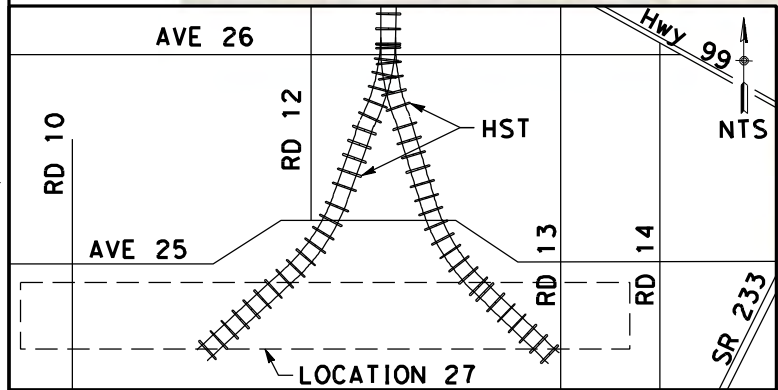


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ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION
1	12/28/11	RG			



DESIGNED BY	D. AYELE
DRAWN BY	C. DELOS REYES
CHECKED BY	A. SILVER
IN CHARGE	A. BOONE
DATE	06/30/2011

RECORD SET  
15% DESIGN  
SUBMITTAL

NOT FOR  
CONSTRUCTION



CALIFORNIA  
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO

UPRR/SR99 WYE/MERCED DO - (WC)  
GRADE SEPARATION - AVENUE 25  
LAYOUT  
SHEET 9 OF 12

CONTRACT NO.	HSR06-007
DRAWING NO.	CT5159-B
SCALE	AS SHOWN
SHEET NO.	### OF ###



MATCH LINE STA 274+00  
SEE DRAWING CT5158-B

MATCH LINE STA 289+00  
SEE DRAWING CT5160-B



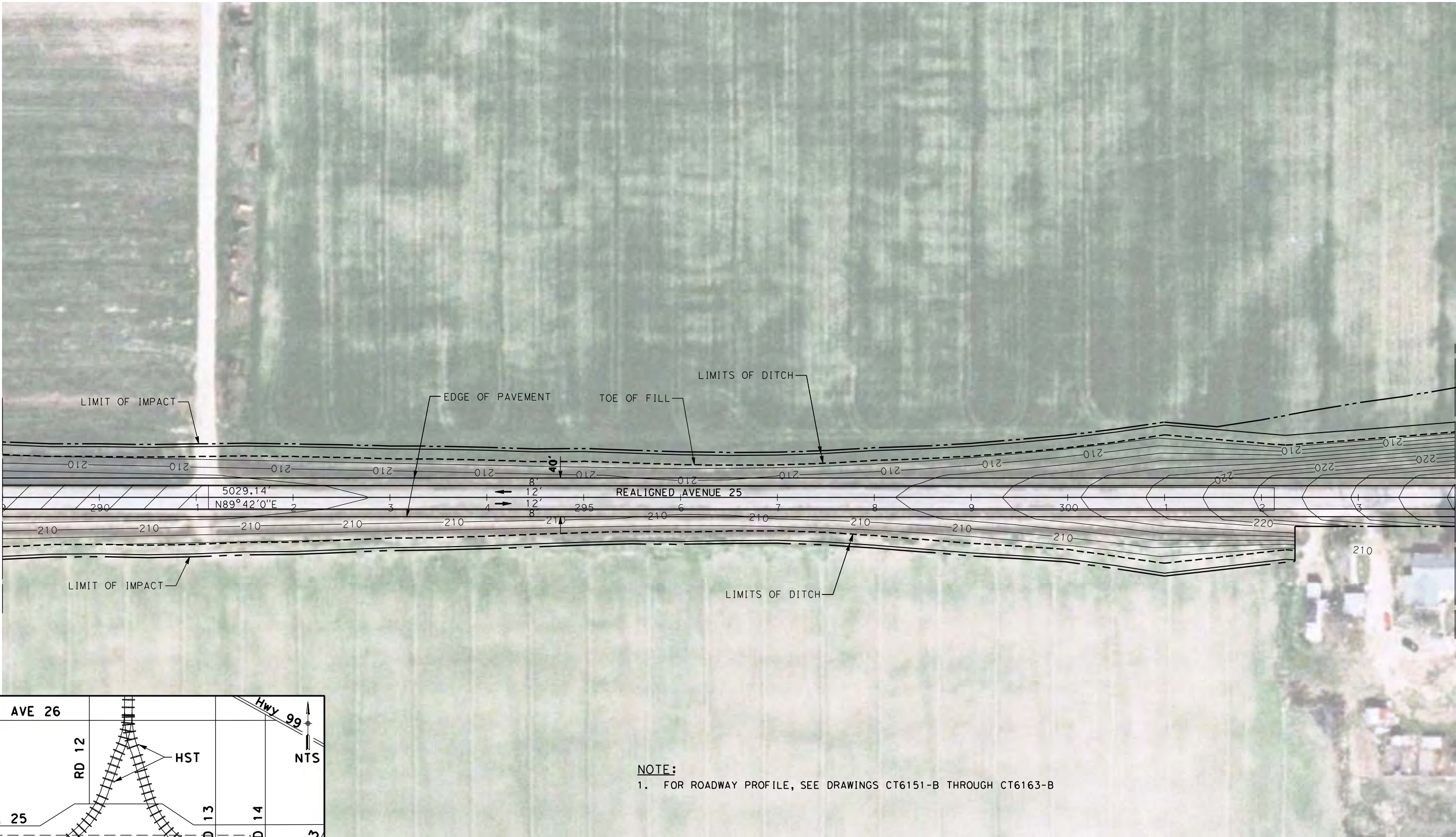


1/5/2012 1:33:48 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\layout\CT5160-B.dgn

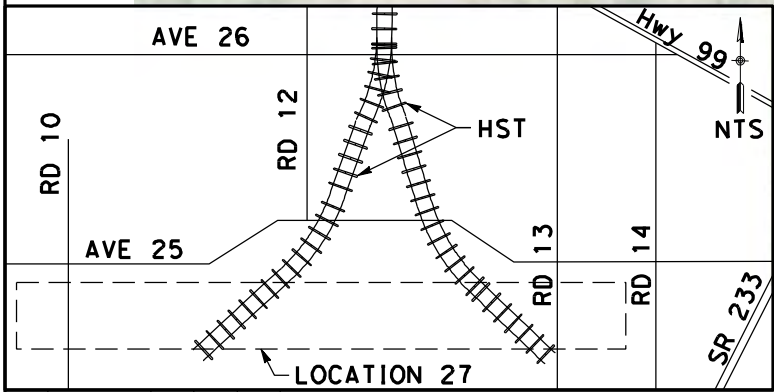
ReyesC1

MATCH LINE STA 289+00  
SEE DRAWING CT5159-B

MATCH LINE STA 304+00  
SEE DRAWING CT5161-B



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6151-B THROUGH CT6163-B



REV	DATE	BY	CHK	APP	DESCRIPTION
1	12/28/11	RG			

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 06/30/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

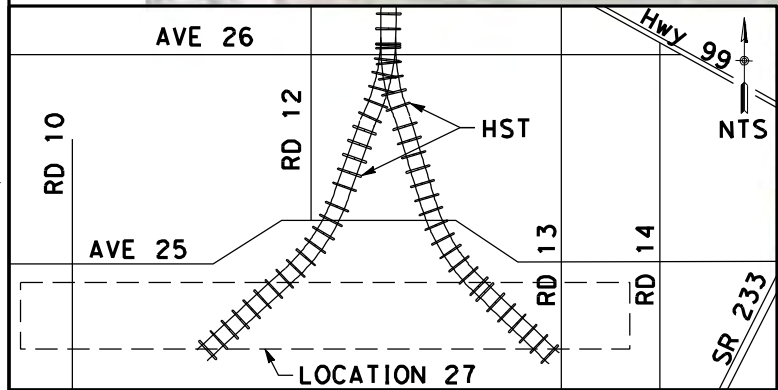
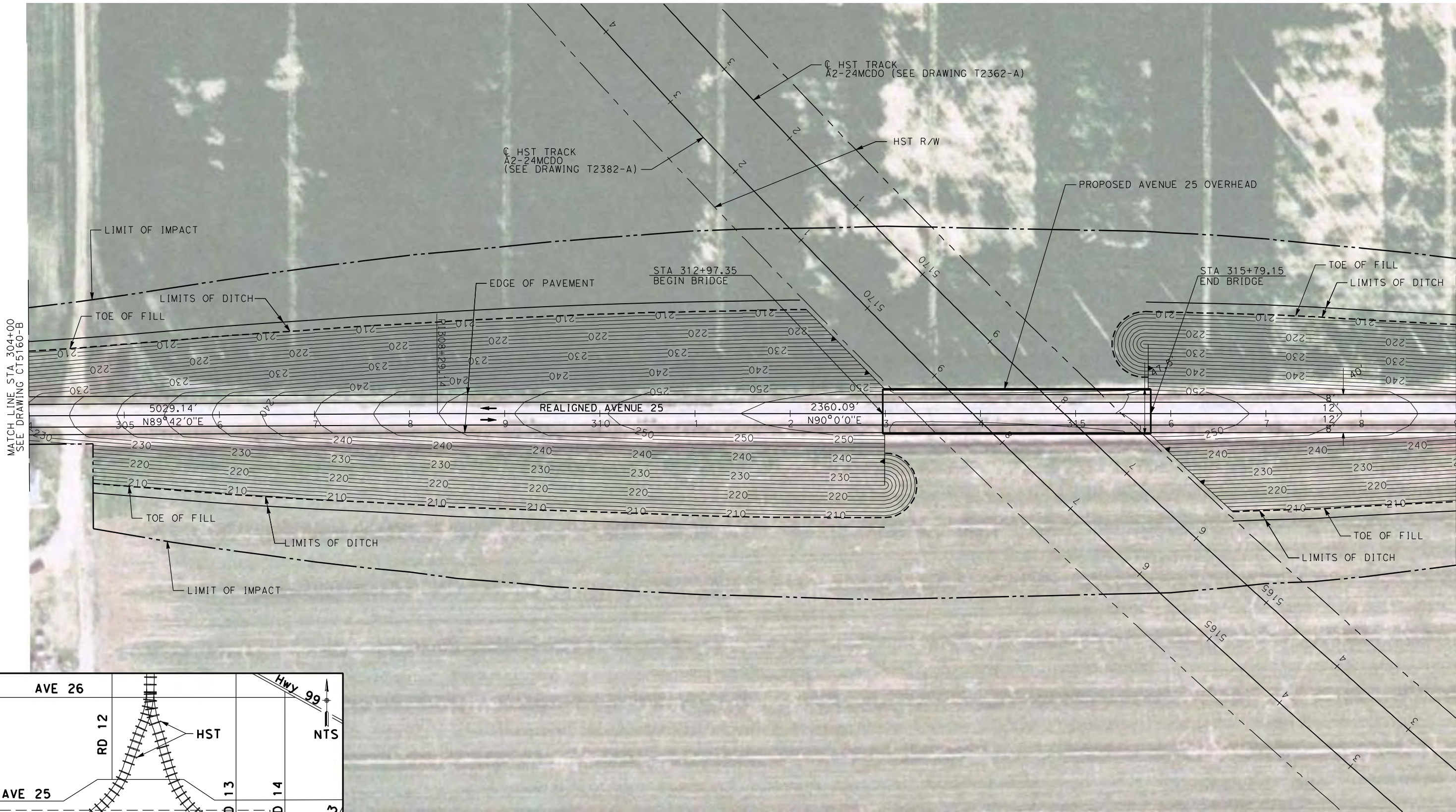
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 WYE/MERCED DO - (WC)  
GRADE SEPARATION - AVENUE 25  
LAYOUT  
SHEET 10 OF 12

CONTRACT NO. HSR06-007
DRAWING NO. CT5160-B
SCALE AS SHOWN
SHEET NO. ### OF ###



1/5/2012 1:33:58 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\layout\CT5161-B.dgn

ReyesC1



**NOTE:**

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6151-B THROUGH CT6163-B



REV	DATE	BY	CHK	APP	DESCRIPTION
1	12/28/11	RG			

DESIGNED BY  
R. LI  
DRAWN BY  
A. TRINH  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
06/30/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**

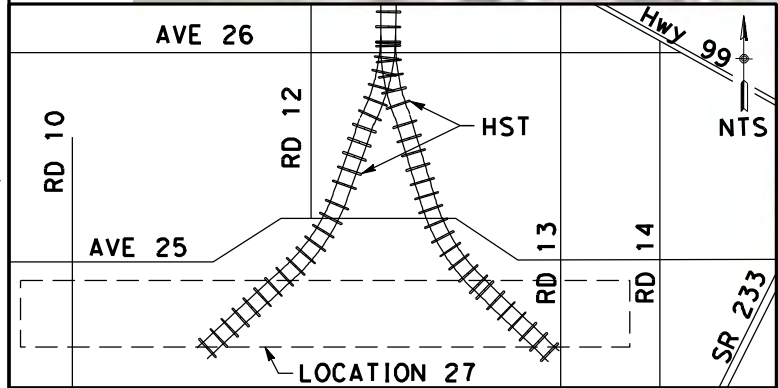
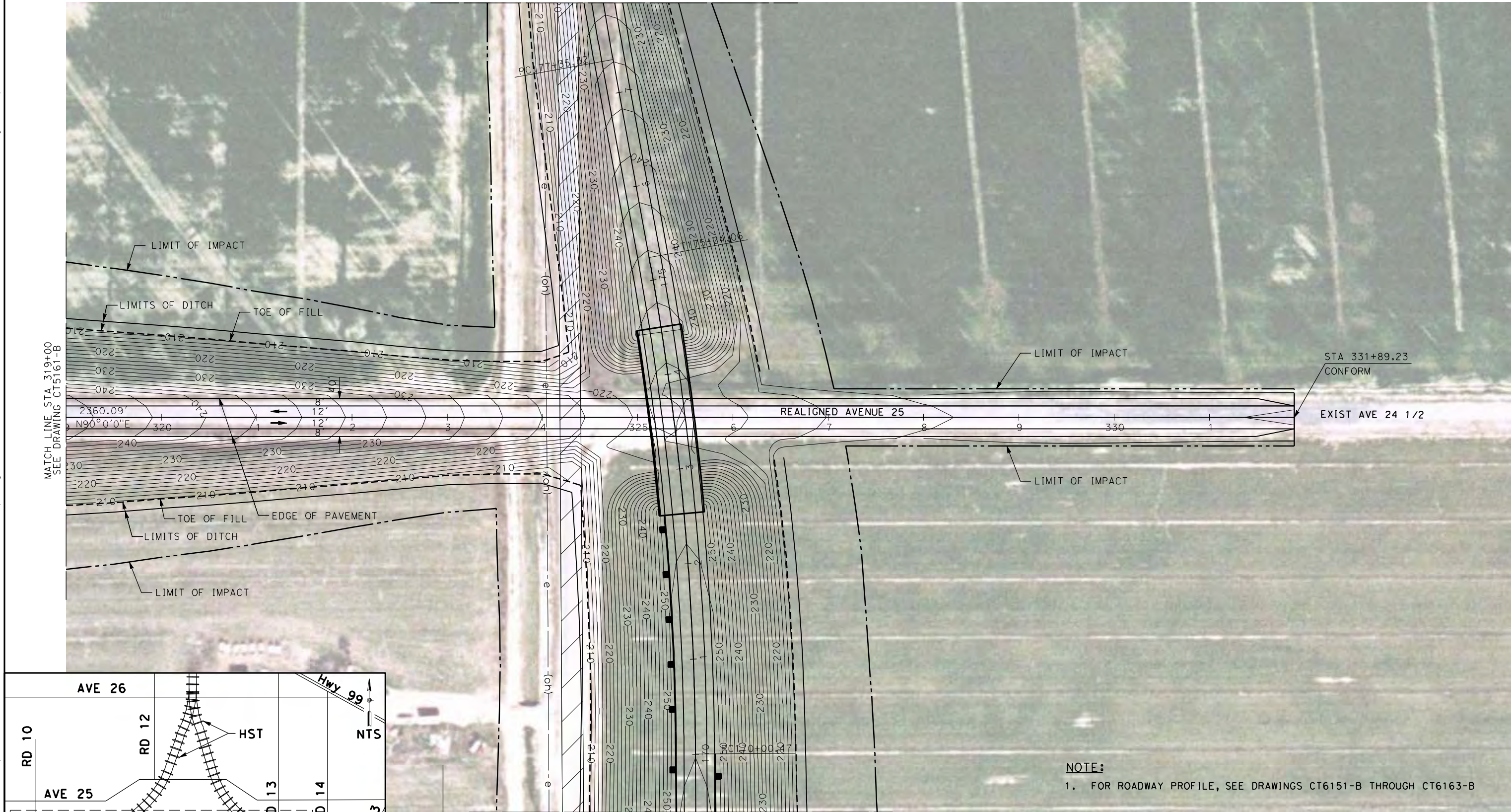
UPRR/SR99 WYE/MERCED DO - (WC)  
GRADE SEPARATION - AVENUE 25  
LAYOUT  
SHEET 11 OF 12

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5161-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



1/5/2012 1:34:07 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\layout\CT5162-B.dgn

ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION
1	12/28/11	RG			

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
06/30/2011

RECORD SET  
15% DESIGN  
SUBMITTAL  
  
NOT FOR  
CONSTRUCTION

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPRR/SR99 WYE/MERCED DO - (WC)  
GRADE SEPARATION - AVENUE 25  
LAYOUT  
SHEET 12 OF 12

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5162-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###

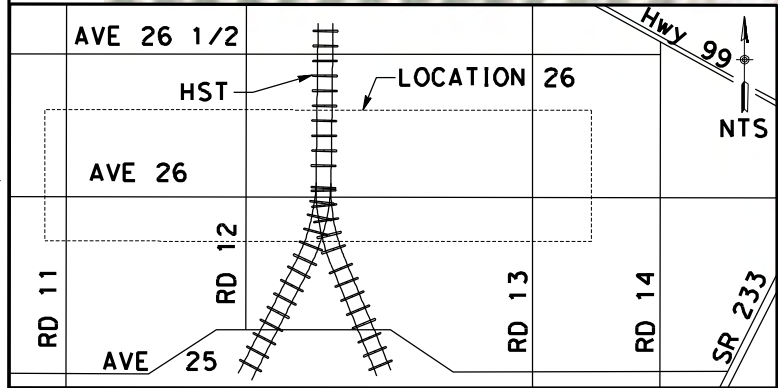


**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6151-B THROUGH CT6163-B



4/27/2011 6:32:49 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\layout\CT5168-B.dgn

ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

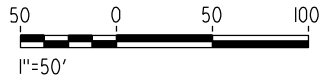
**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CURVE DATA**

No.	R	$\Delta$	T	L	V
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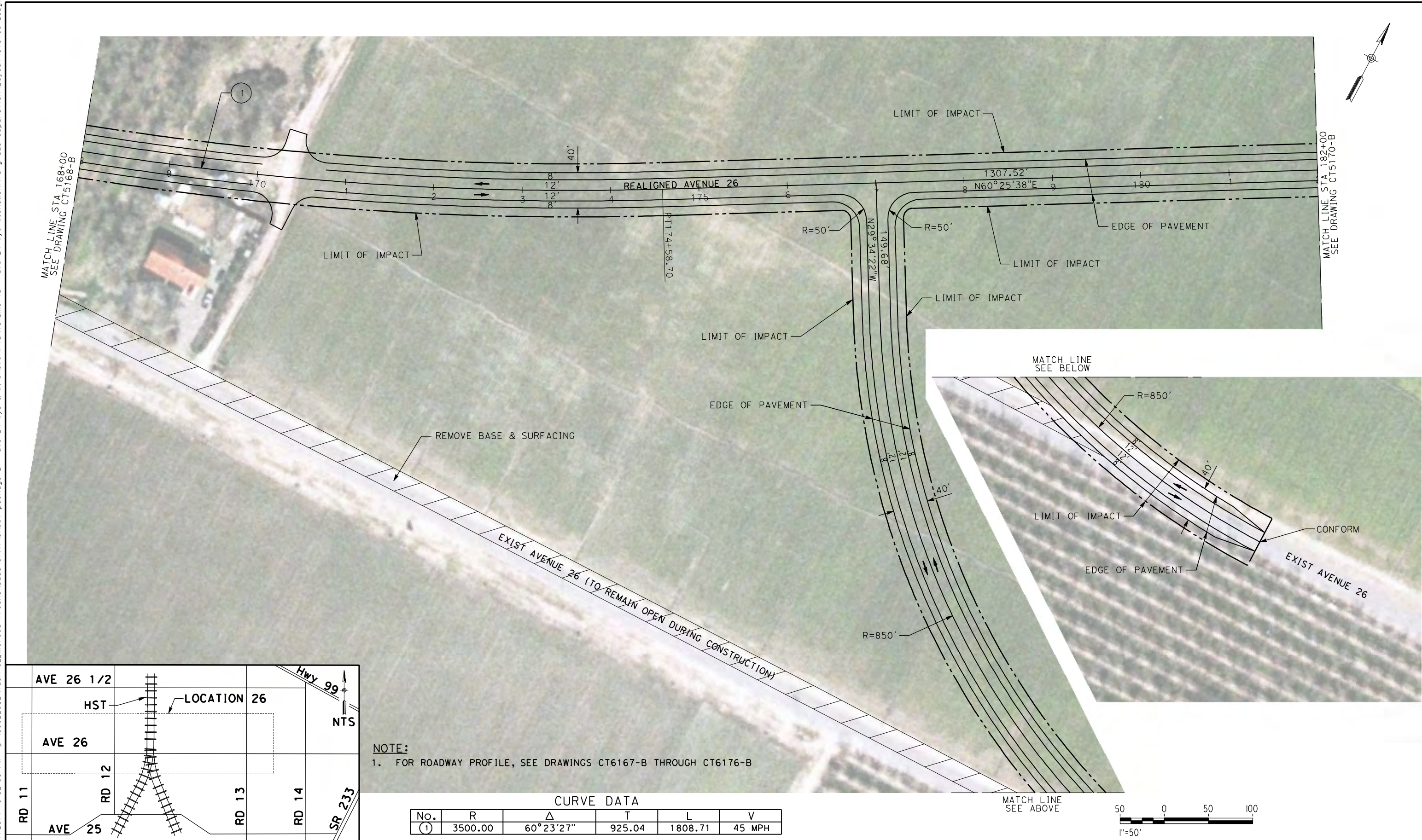
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 WYE/MERCED DO - (WC)  
GRADE SEPARATION - AVENUE 26 ALT 1  
LAYOUT  
SHEET 1 OF 10

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5168-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 6:32:59 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye & w. chowchilla\grade separation\layout\CT5169-B.dgn

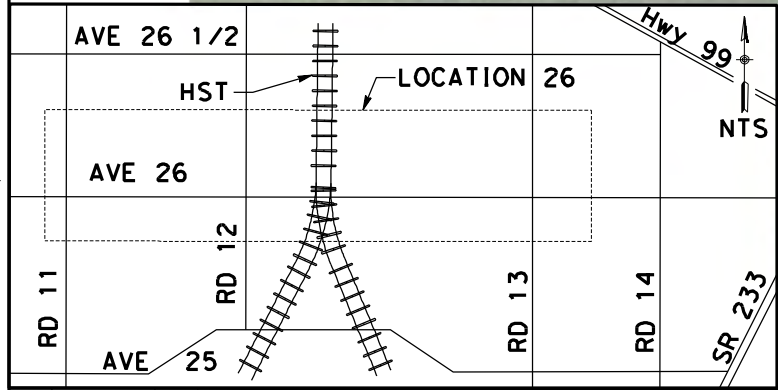
ReyesC1





4/27/2011 6:33:08 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\layout\CT5170-B.dgn

ReyesC1

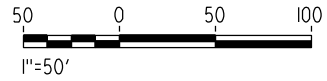


**NOTE:**

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6167-B THROUGH CT6176-B

**CURVE DATA**

No.	R	$\Delta$	T	L	V
(2)	3500.00	60°25'38"	923.85	1806.50	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

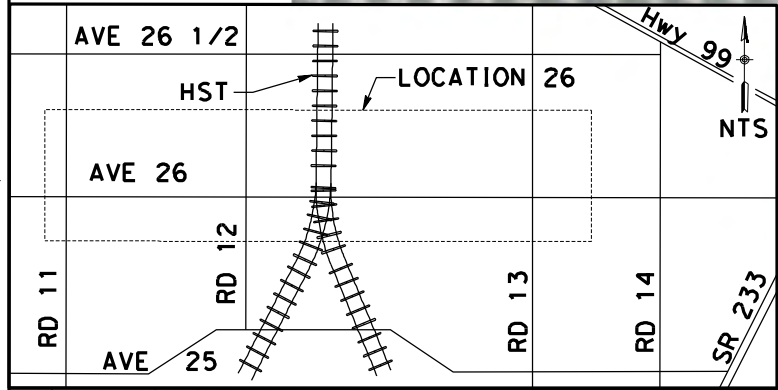
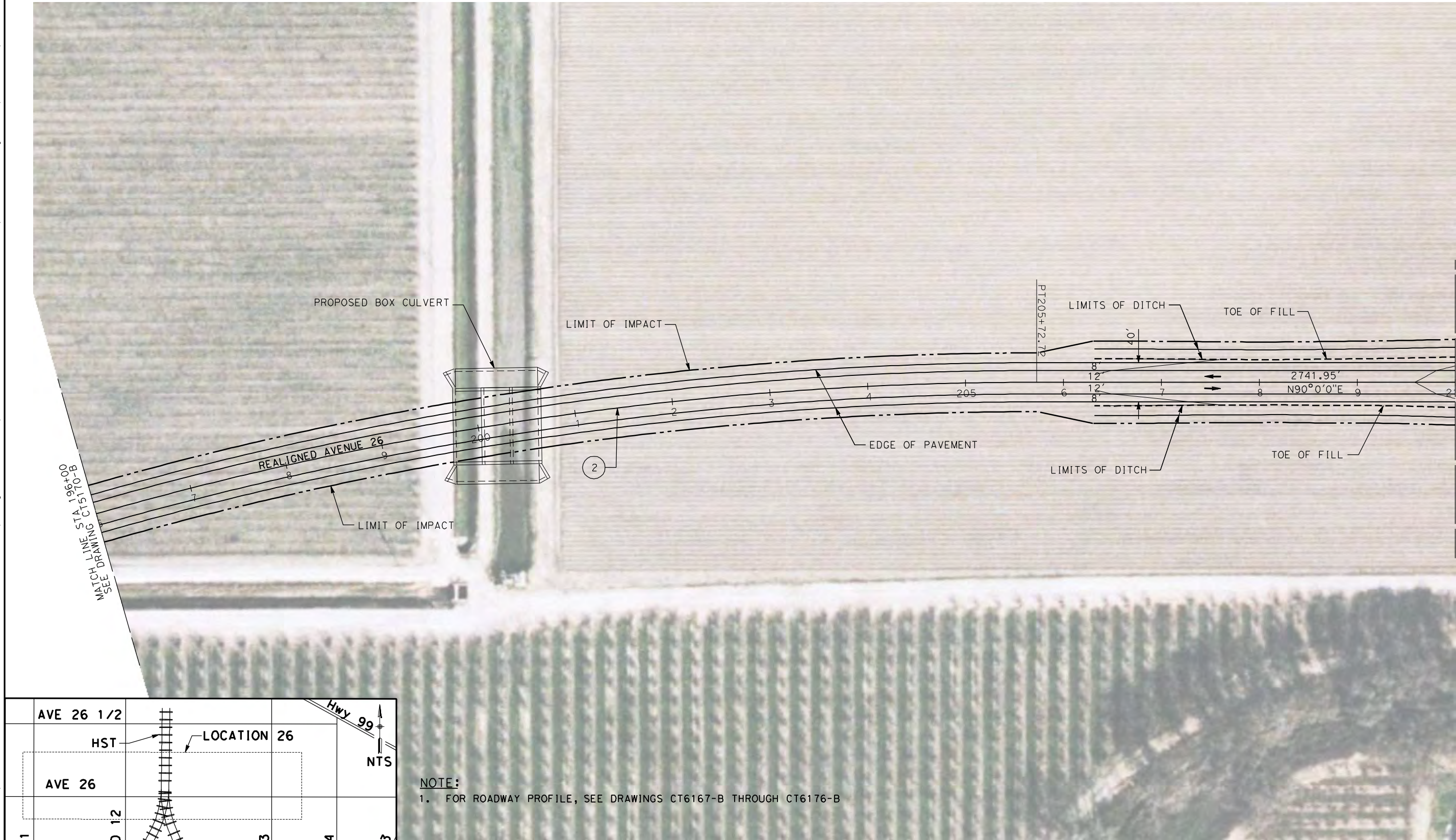
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**

UPRR/SR99 WYE/MERCED DO - (WC)  
GRADE SEPARATION - AVENUE 26 ALT 1  
LAYOUT  
SHEET 3 OF 10

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5170-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###

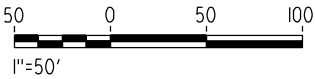


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**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6167-B THROUGH CT6176-B

CURVE DATA					
No.	R	$\Delta$	T	L	V
(2)	3500.00	60°25'38"	923.85	1806.50	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

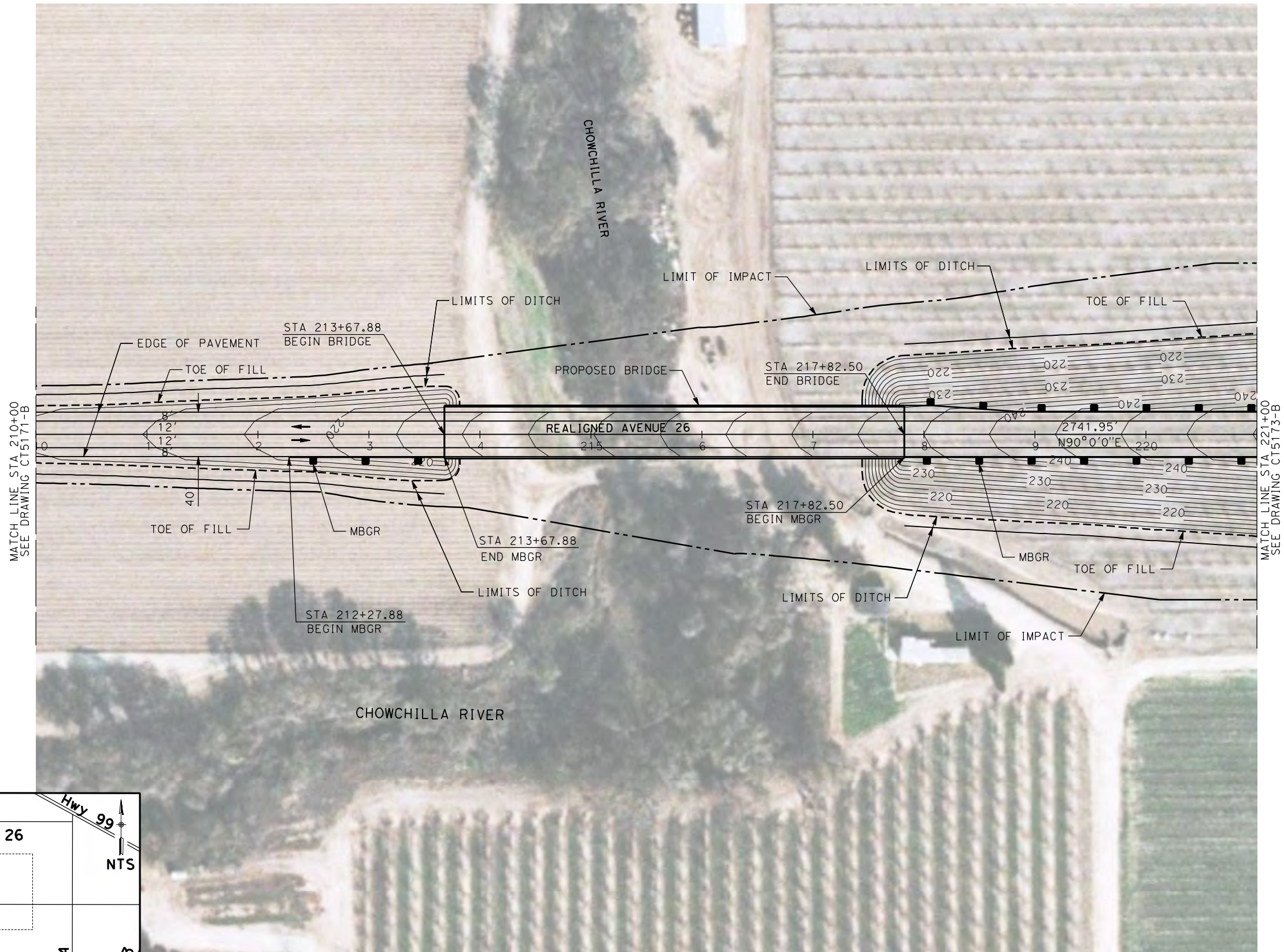
**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 WYE/MERCED DO - (WC)  
GRADE SEPARATION - AVENUE 26 ALT 1  
LAYOUT  
SHEET 4 OF 10

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5171-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###





NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6167-B THROUGH CT6176-B

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY	D. AYELE
DRAWN BY	C. DELOS REYES
CHECKED BY	A. SILVER
IN CHARGE	A. BOONE
DATE	04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

## CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

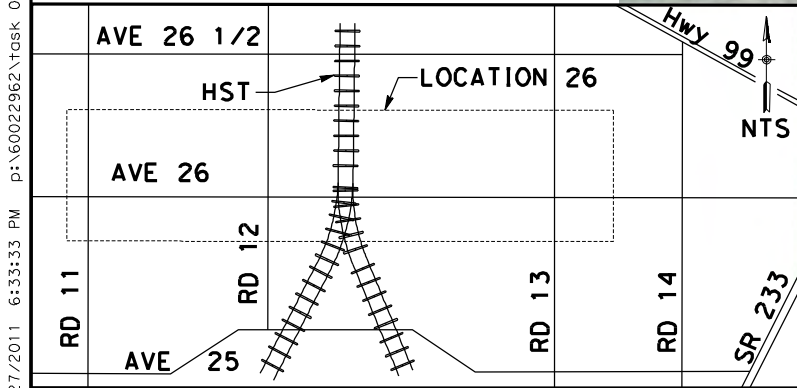
UPRR/SR99 WYE/MERCED DO - (WC)  
GRADE SEPARATION - AVENUE 26 ALT 1  
LAYOUT  
SHEET 5 OF 10

CONTRACT NO.	HSR06-007
DRAWING NO.	CT5172-B
SCALE	AS SHOWN
SHEET NO.	### OF ###

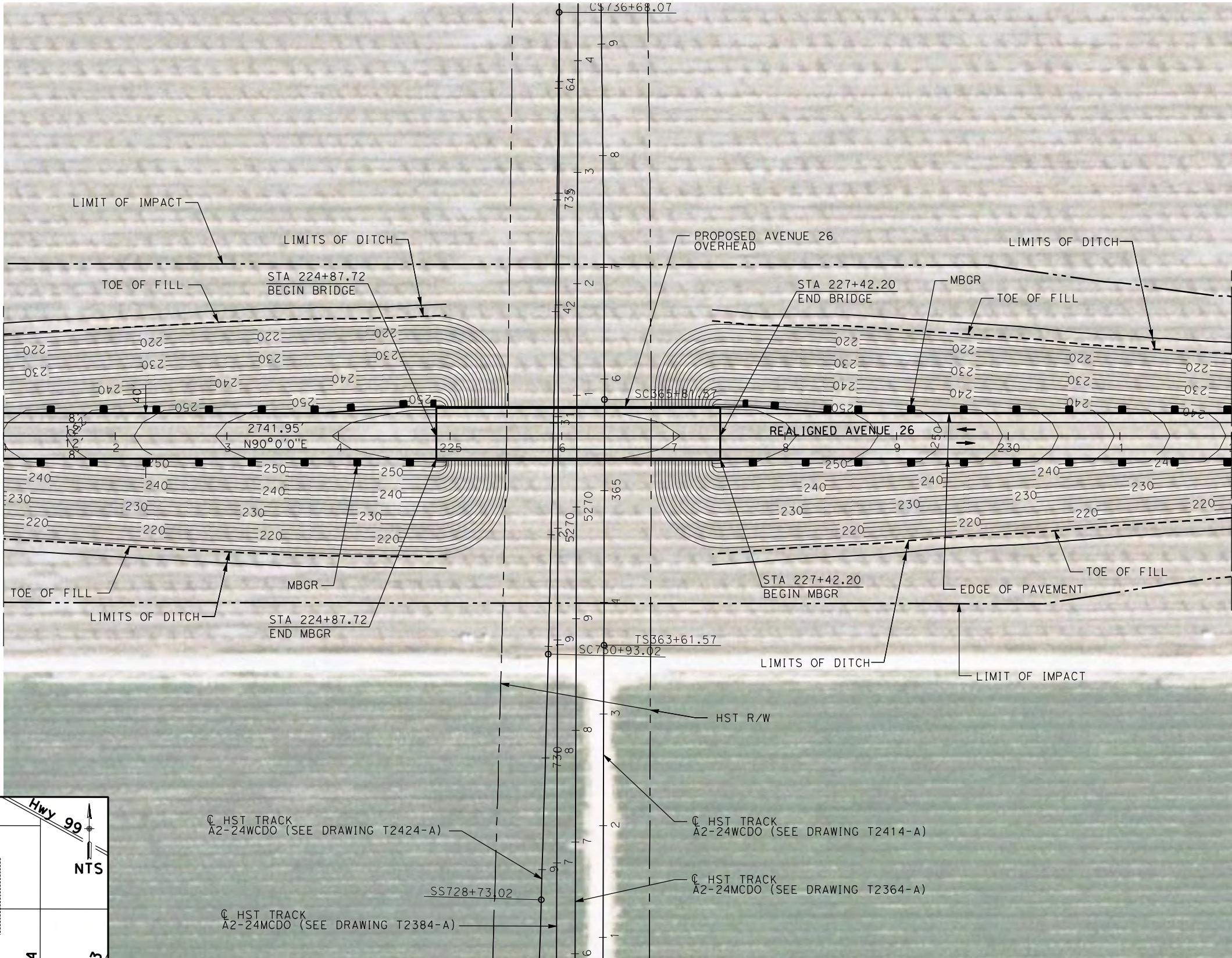


4/27/2011 6:33:33 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\layout\CT5173-B.dgn

ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION



NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6167-B THROUGH CT6176-B



DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**

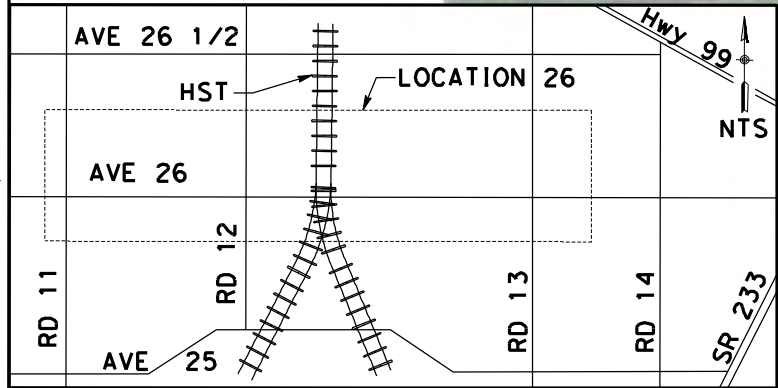
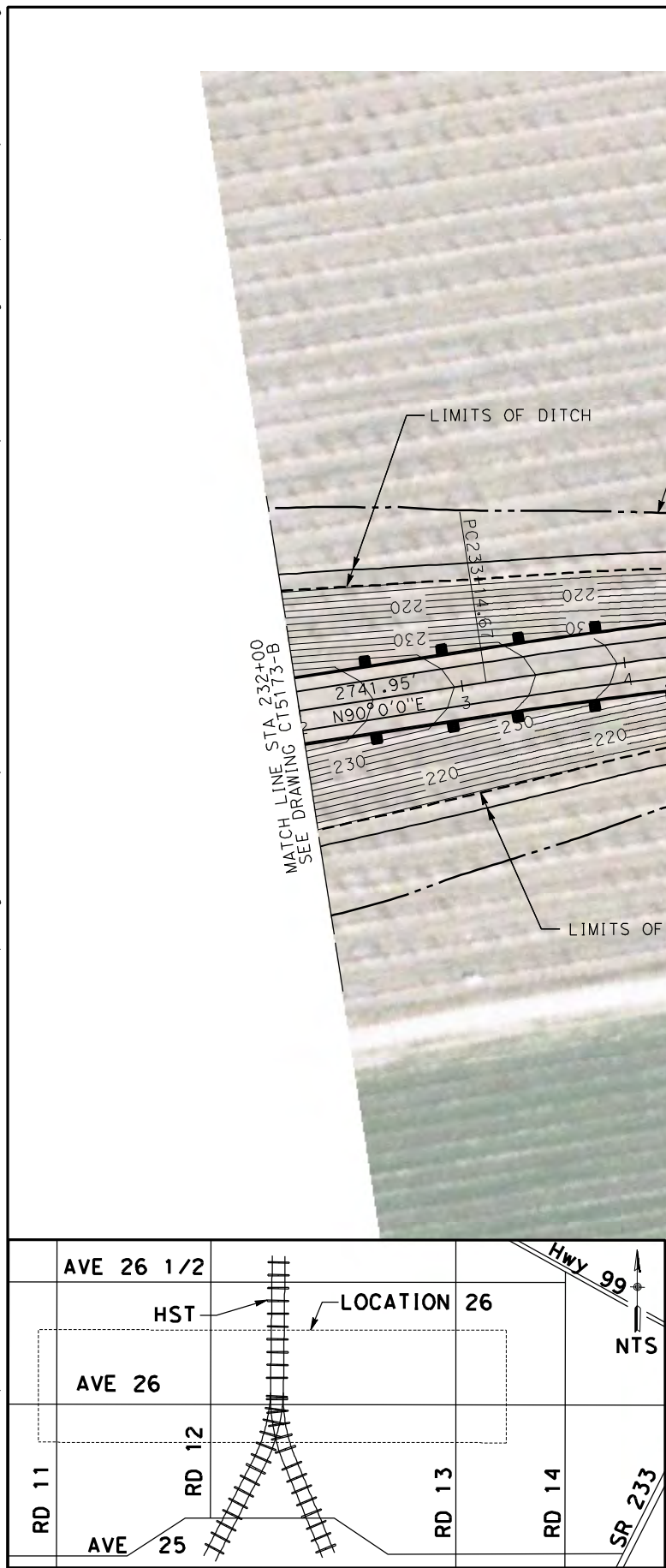


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 WYE/MERCED DO - (WC)  
GRADE SEPARATION - AVENUE 26 ALT 1  
LAYOUT  
SHEET 6 OF 10

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5173-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 6:33:41 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\Layout\CT5174-B.dgn



NOTE:  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6167-B THROUGH CT6176-B

CURVE DATA					
No.	R	$\Delta$	T	L	V
(3)	3500.00	60°25'38"	923.85	1806.50	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**

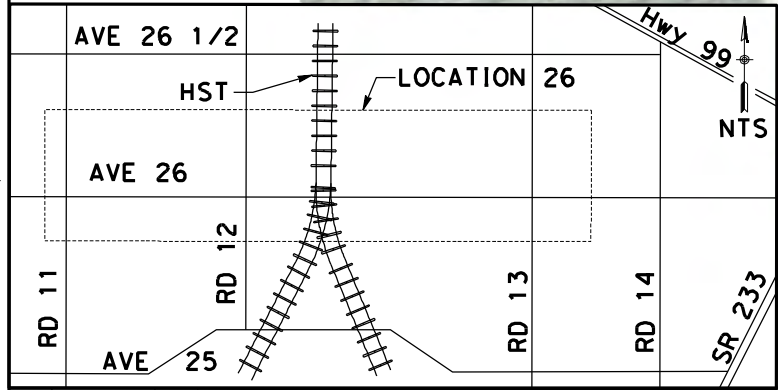
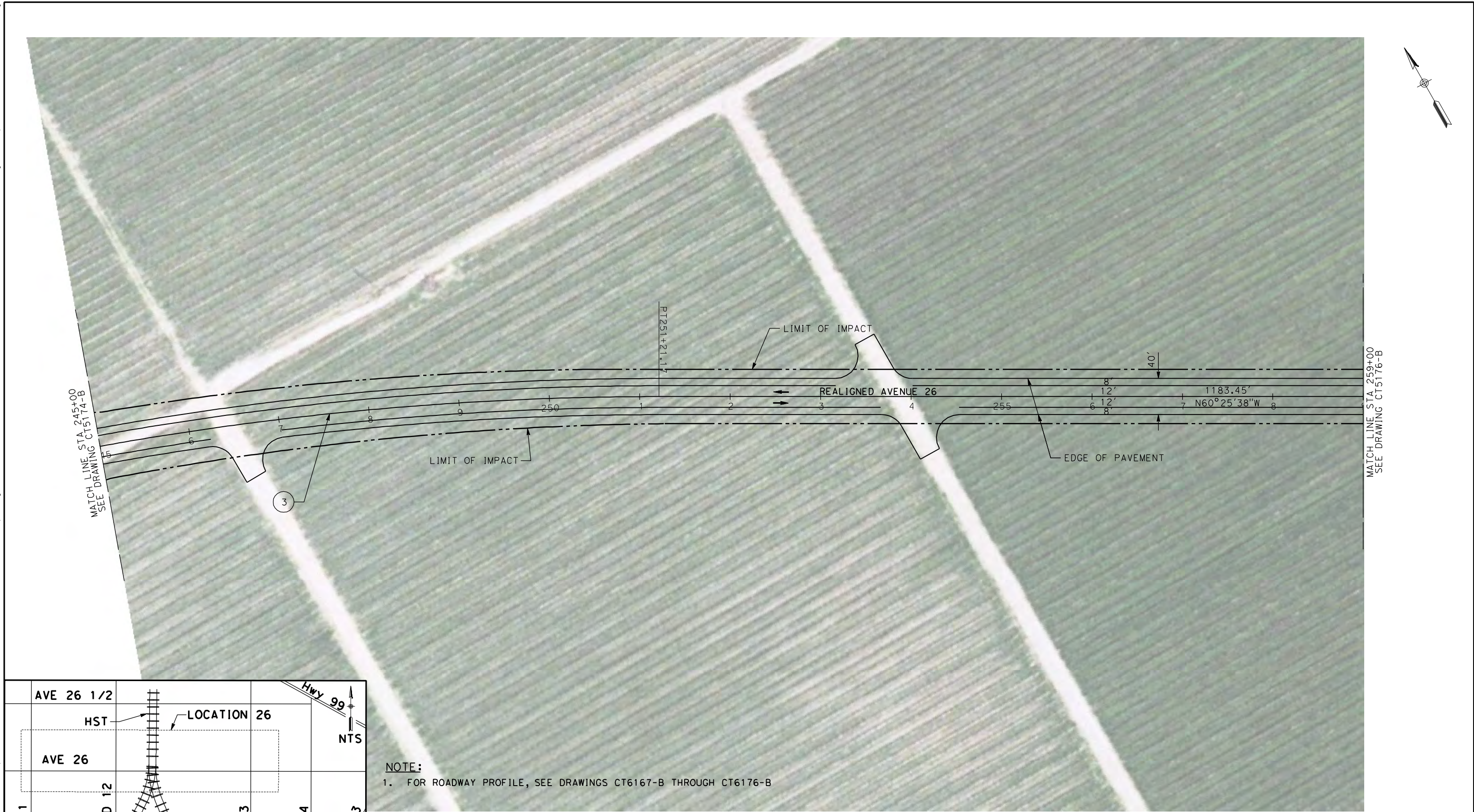


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 WYE/MERCED DO - (WC)  
GRADE SEPARATION - AVENUE 26 ALT 1  
LAYOUT  
SHEET 7 OF 10

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5174-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 6:33:51 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\layout\CT5175-B.dgn



NOTE:  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6167-B THROUGH CT6176-B

CURVE DATA					
No.	R	$\Delta$	T	L	V
(3)	3500.00	60°25'38"	923.85	1806.50	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

RECORD SET  
15% DESIGN  
SUBMITTAL

NOT FOR  
CONSTRUCTION



CALIFORNIA  
HIGH-SPEED RAIL AUTHORITY

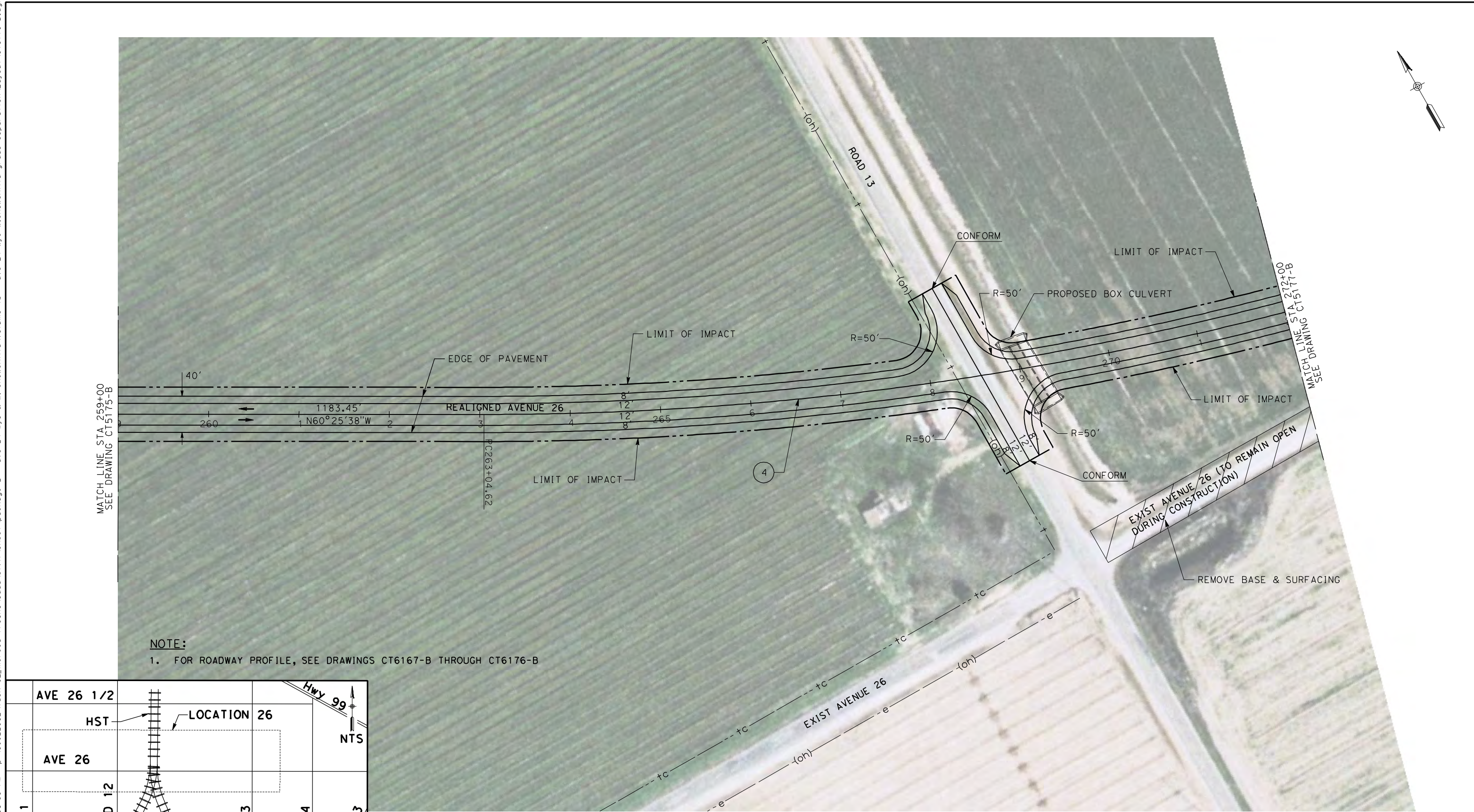
CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO  
UPRR/SR99 WYE/MERCED DO - (WC)  
GRADE SEPARATION - AVENUE 26 ALT 1  
LAYOUT  
SHEET 8 OF 10

CONTRACT NO. HSR06-007
DRAWING NO. CT5175-B
SCALE AS SHOWN
SHEET NO. ### OF ###

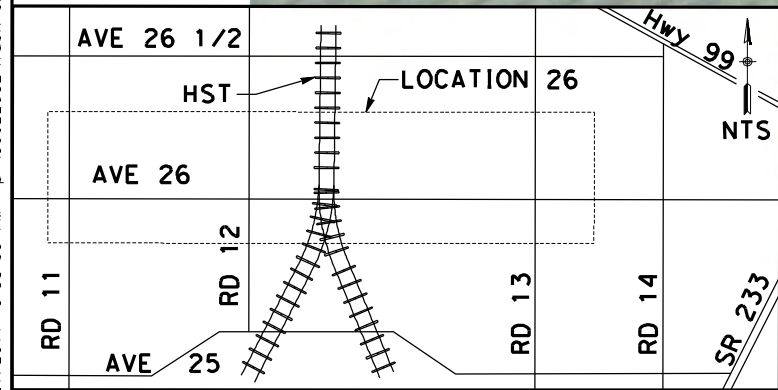


4/27/2011 6:33:59 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\layout\CT5176-B.dgn

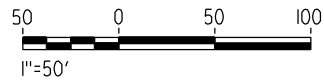
ReyesC1



NOTE:  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6167-B THROUGH CT6176-B



CURVE DATA					
No.	R	$\Delta$	T	L	V
(4)	3500.00	60°15'36"	929.32	1816.72	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



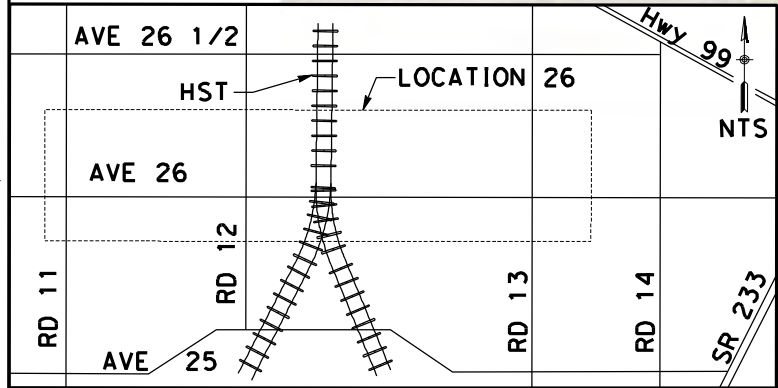
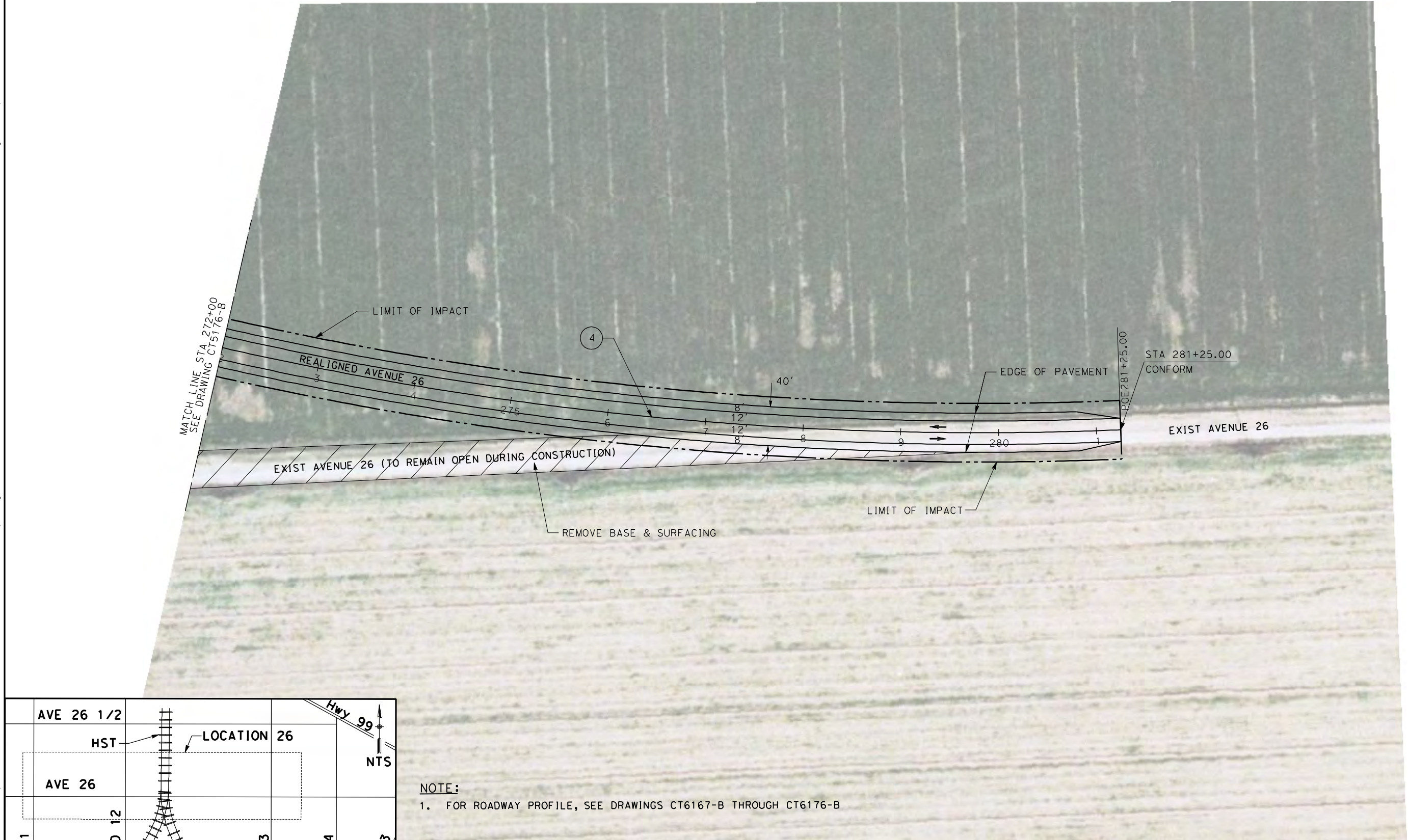
**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 WYE/MERCED DO - (WC)  
GRADE SEPARATION - AVENUE 26 ALT 1  
LAYOUT  
SHEET 9 OF 10

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5176-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



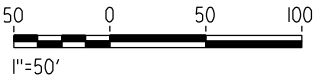
4/27/2011 6:34:08 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\layout\CT5177-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

NOTE:  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6167-B THROUGH CT6176-B

CURVE DATA					
No.	R	$\Delta$	T	L	V
(4)	3500.00	60°15'36"	929.32	1816.72	45 MPH



DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

RECORD SET  
15% DESIGN  
SUBMITTAL

NOT FOR  
CONSTRUCTION

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**

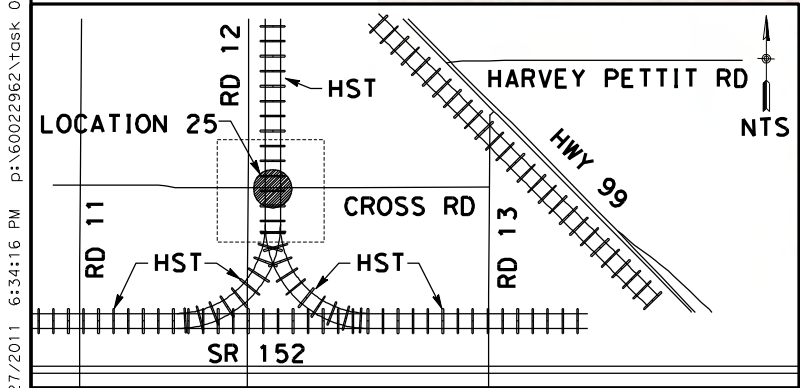


**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPRR/SR99 WYE/MERCED DO - (WC)  
GRADE SEPARATION - AVENUE 26 ALT 1  
LAYOUT  
SHEET 10 OF 10

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5177-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 6:34:16 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\layout\CT5179-B.dgn



NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6177-B THROUGH CT6179-B

CURVE DATA

No.	R	$\Delta$	T	L	V
(1)	3000.00	79°22'35"	278.92	556.25	45 MPH
(2)	3000.00	79°0'0"	288.87	575.96	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE

DRAWN BY  
C. DELOS REYES

CHECKED BY  
A. SILVER

IN CHARGE  
A. BOONE

DATE  
04/29/2011

RECORD SET  
15% DESIGN  
SUBMITTAL

NOT FOR  
CONSTRUCTION

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**

UPRR/SR99 MERCED DO - (WC)  
GRADE SEPARATION - CROSS ROAD  
LAYOUT  
SHEET 1 OF 3

CONTRACT NO.  
HSR06-007

DRAWING NO.  
CT5179-B

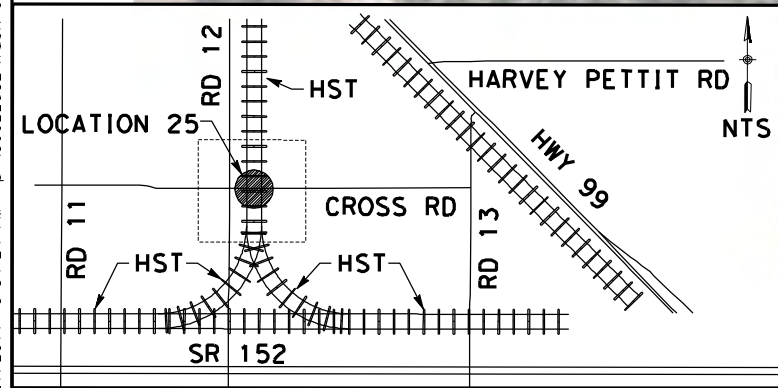
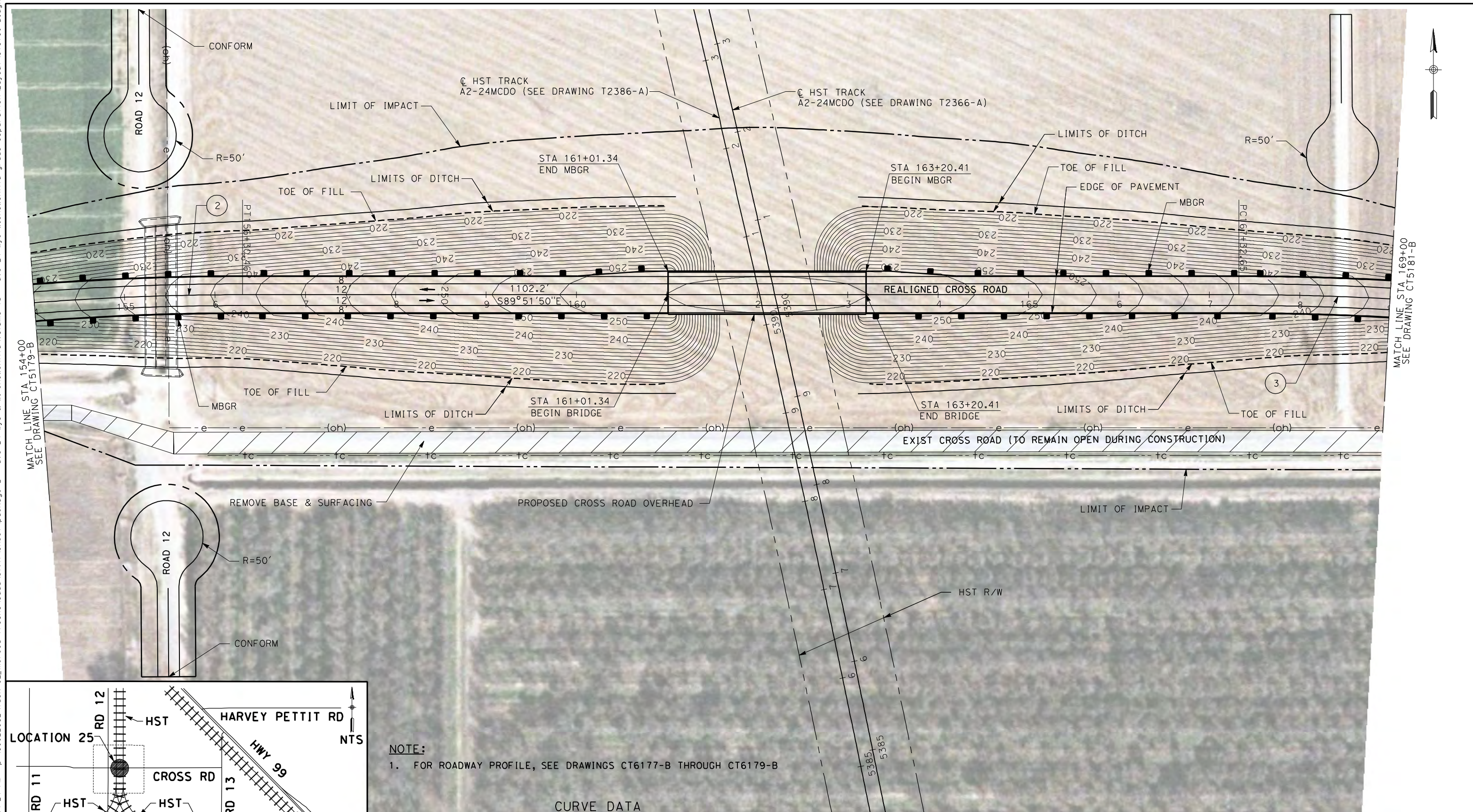
SCALE  
AS SHOWN

SHEET NO.  
### OF ###



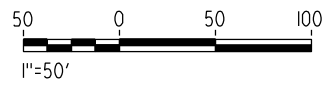
4/27/2011 6:34:24 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\layout\CT5180-B.dgn

ReyesC1



NOTE:  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6177-B THROUGH CT6179-B

CURVE DATA					
No.	R	$\Delta$	T	L	V
(2)	3000.00	79°0'0"	288.87	575.96	45 MPH
(3)	3000.00	79°0'17"	288.74	575.71	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

RECORD SET  
15% DESIGN  
SUBMITTAL  
  
NOT FOR  
CONSTRUCTION

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**

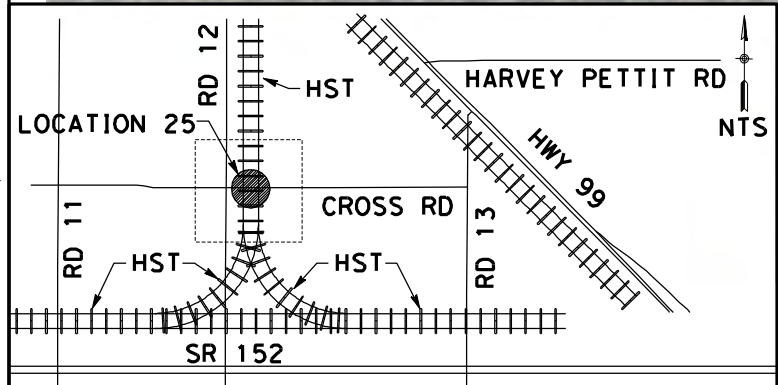
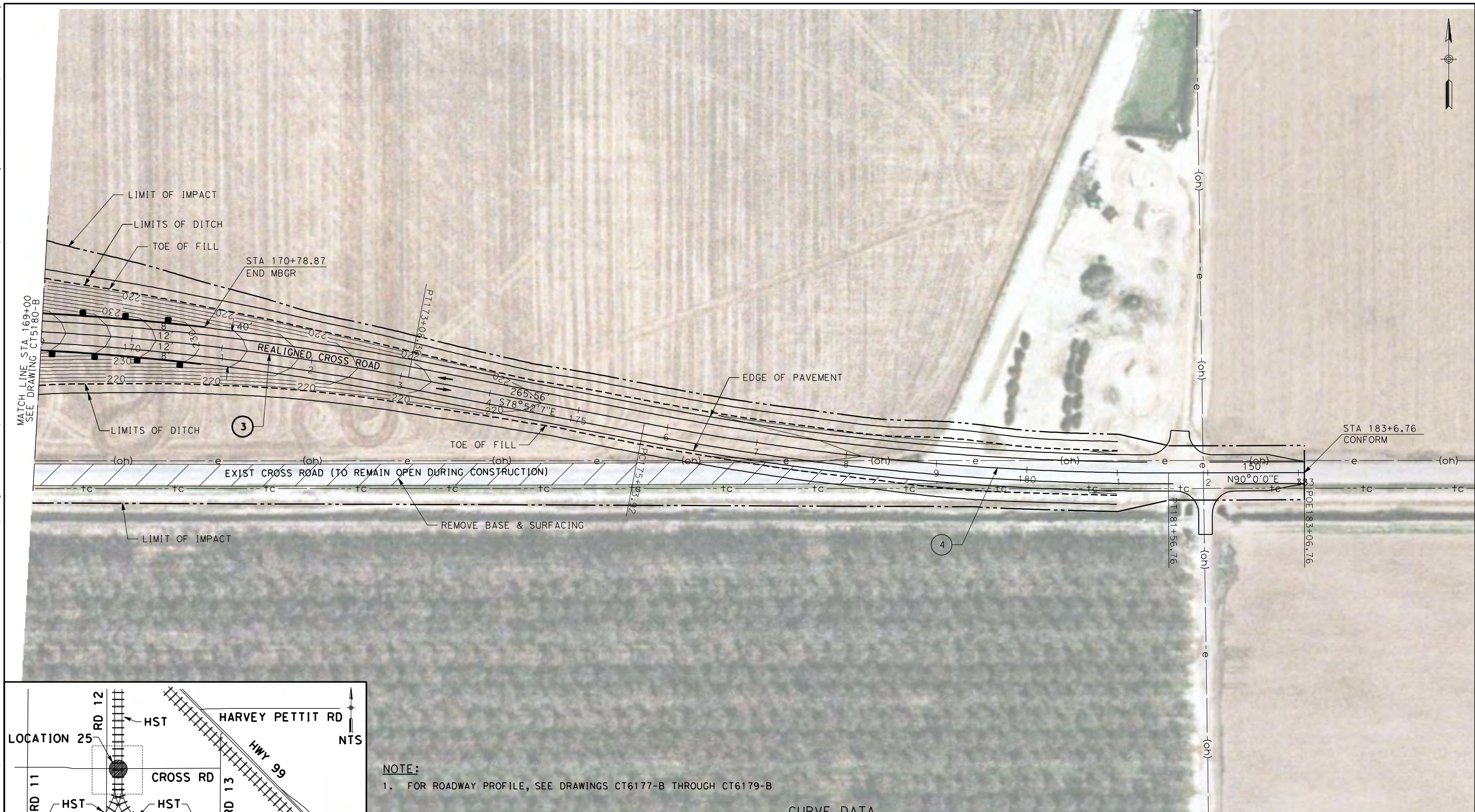


**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPRR/SR99 MERCED DO - (WC)  
GRADE SEPARATION - CROSS ROAD  
LAYOUT  
SHEET 2 OF 3

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5180-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



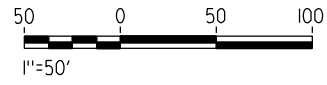
4/27/2011 6:34:33 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\layout\CT5181-B.dgn



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6177-B THROUGH CT6179-B

**CURVE DATA**

No.	R	$\Delta$	T	L	V
(3)	3000.00	79°0'17"	288.74	575.71	45 MPH
(4)	3000.00	78°52'7"	292.34	582.84	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MERCED DO - (WC)  
GRADE SEPARATION - CROSS ROAD  
LAYOUT  
SHEET 3 OF 3

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5181-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###

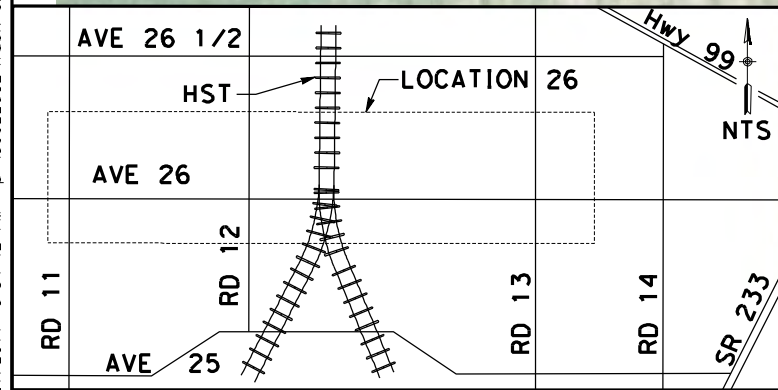


4/27/2011 6:34:42 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\layout\CT5187-B.dgn

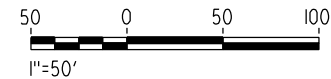
ReyesC1



MATCH LINE STA 157+00  
SEE DRAWING CT5188-B



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6185-B THROUGH CT6187-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



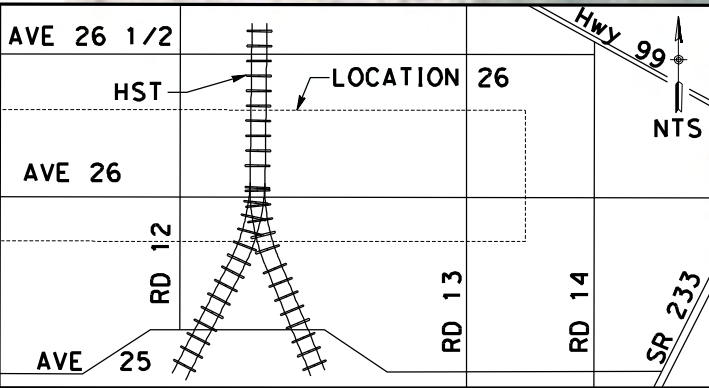
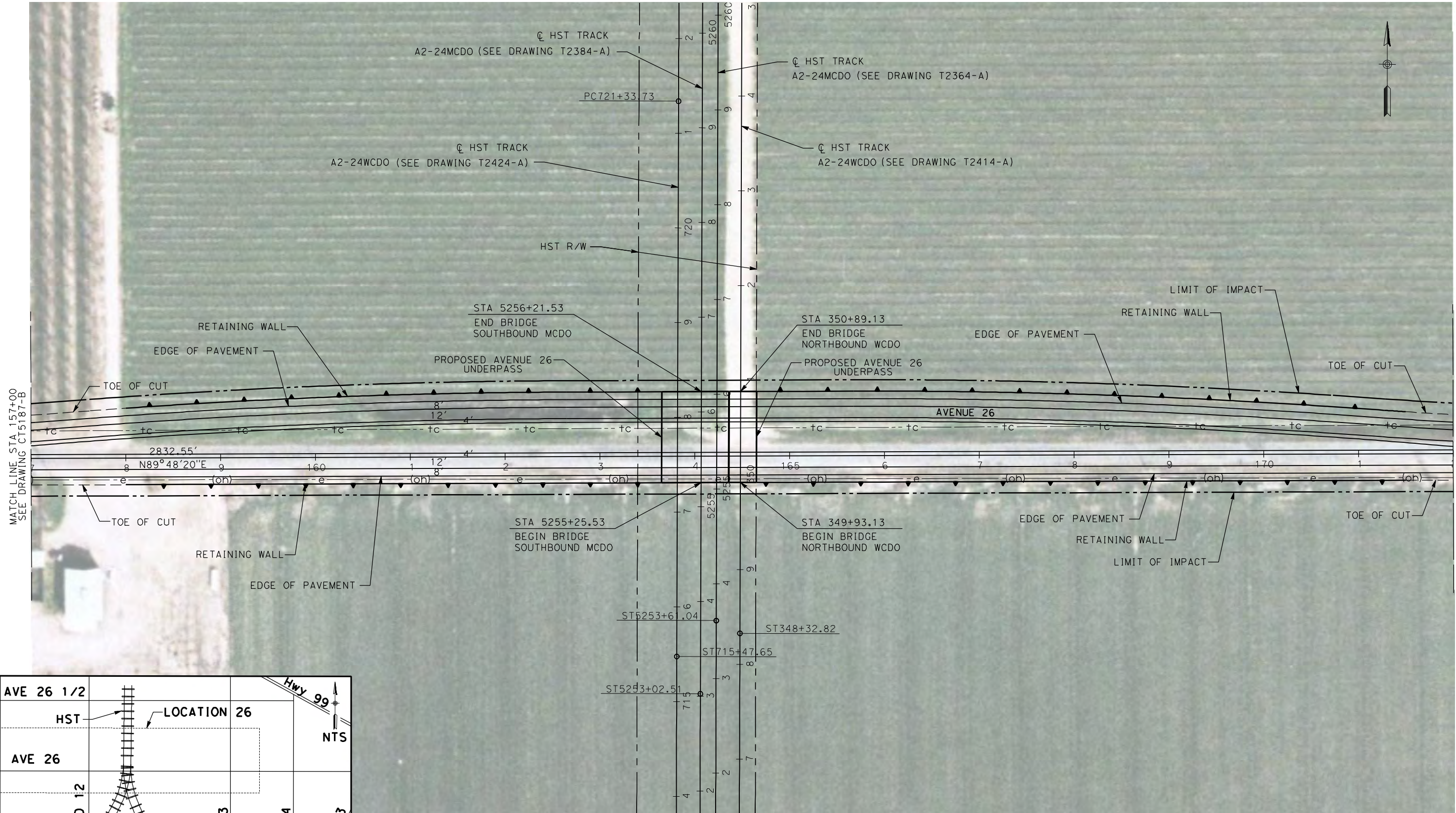
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 WYE/MERCED DO - (WC)  
UNDERPASS - AVENUE 26 ALT 2  
LAYOUT  
SHEET 1 OF 3

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5187-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###

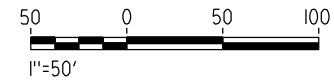


4/27/2011 6:34:50 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\layout\CT5188-B.dgn

ReyesC1



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6185-B THROUGH CT6187-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



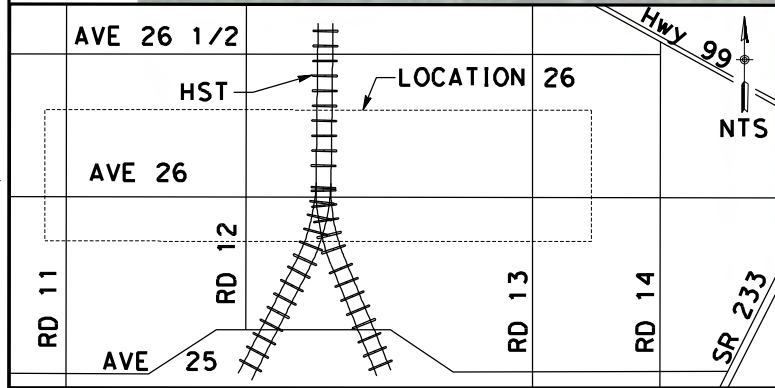
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 WYE/MERCED DO - (WC)  
UNDERPASS - AVENUE 26 ALT 2  
LAYOUT  
SHEET 2 OF 3

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5188-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 6:34:57 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\layout\CT5189-B.dgn

ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

NOTE:  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6185-B THROUGH CT6187-B

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

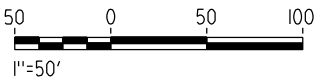
RECORD SET  
15% DESIGN  
SUBMITTAL  
  
NOT FOR  
CONSTRUCTION

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



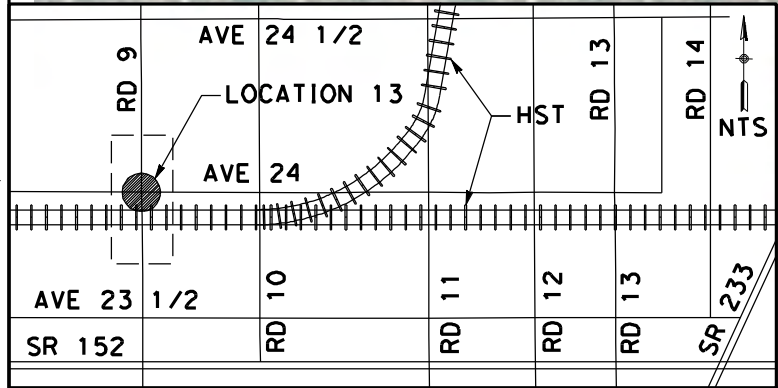
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPRR/SR99 WYE/MERCED DO - (WC)  
UNDERPASS - AVENUE 26 ALT 2  
LAYOUT  
SHEET 3 OF 3

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5189-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###

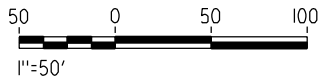




4/27/2011 6:35:06 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\layout\CT5190-B.dgn



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6188-B THROUGH CT6190-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

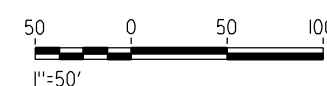
**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE/WYE - (AVE 24)  
GRADE SEPARATION - ROAD 9 ALONG EXIST ALT 2  
LAYOUT  
SHEET 1 OF 3

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5190-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



[illegible]

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**

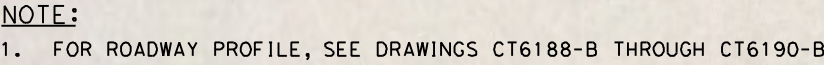
**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2M HILL**



CONTRACT NO.	HSR06-007
DRAWING NO.	CT5191-B
SCALE	AS SHOWN
SHEET NO.	### OF ###





REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE/WYE - (AVE 24)  
GRADE SEPARATION - ROAD 9 ALONG EXIST ALT 2  
LAYOUT  
SHEET 3 OF 3

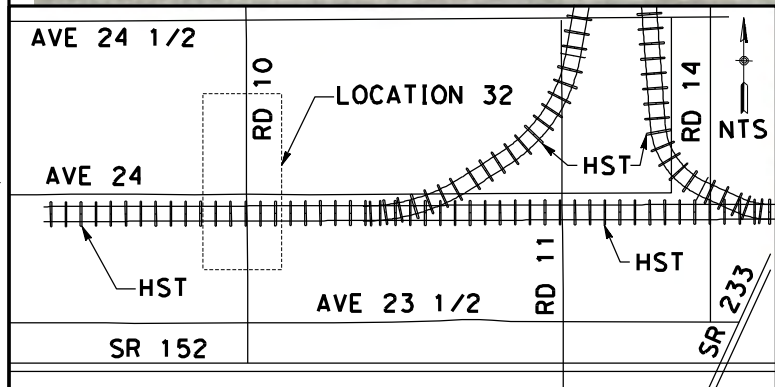
CONTRACT NO. HSR06-007
DRAWING NO. CT5192-B
SCALE AS SHOWN
SHEET NO. ### OF ###



4/27/2011 6:35:41 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\layout\CT5193-B.dgn

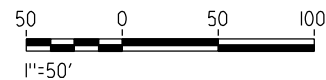


MATCH LINE STA 184+00  
SEE DRAWING CT5194-B



**NOTE:**

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6191-B THROUGH CT6193-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**

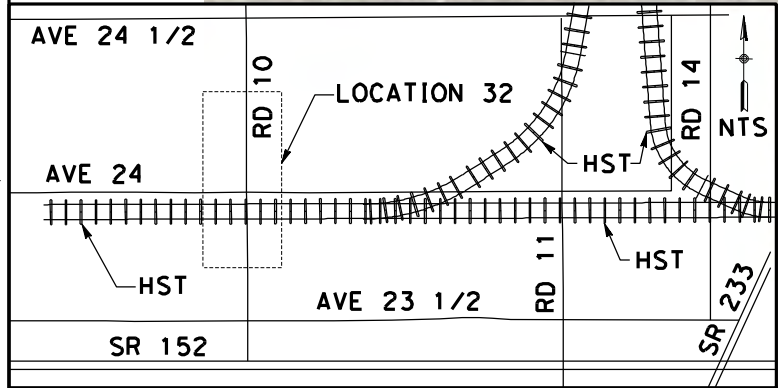
UPRR/SR99 MAINLINE/WYE - (WC)  
GRADE SEPARATION - ROAD 10 ALONG EXIST ALT 2  
LAYOUT  
SHEET 1 OF 3

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5193-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 6:35:51 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\layout\CT5194-B.dgn

ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

NOTE:  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6191-B THROUGH CT6193-B

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

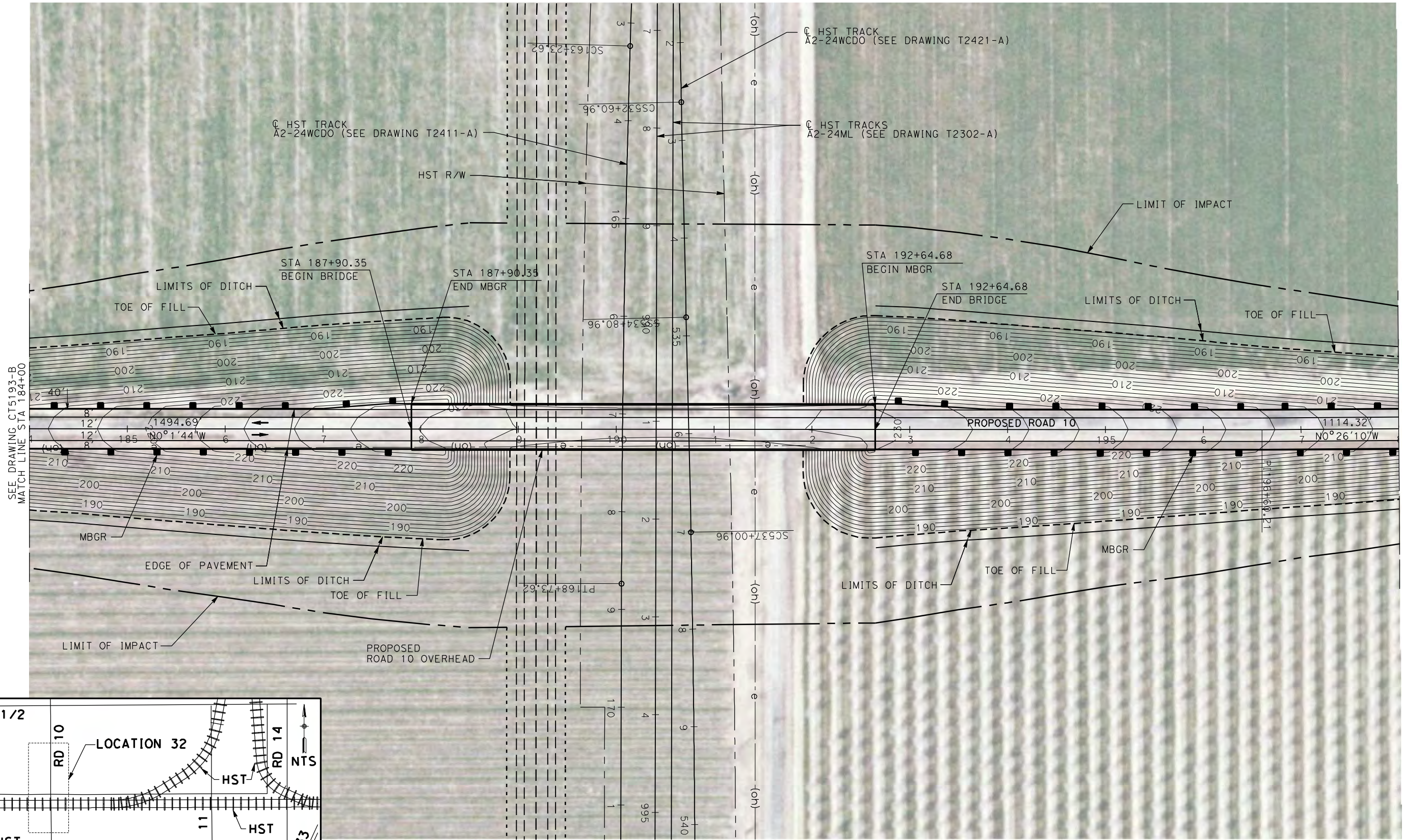
RECORD SET  
15% DESIGN  
SUBMITTAL  
  
NOT FOR  
CONSTRUCTION

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



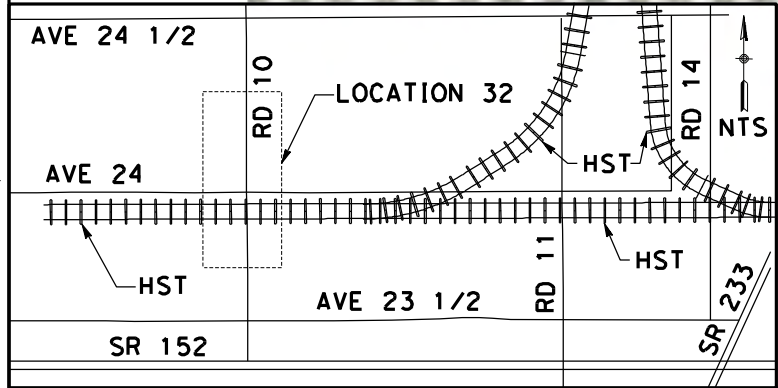
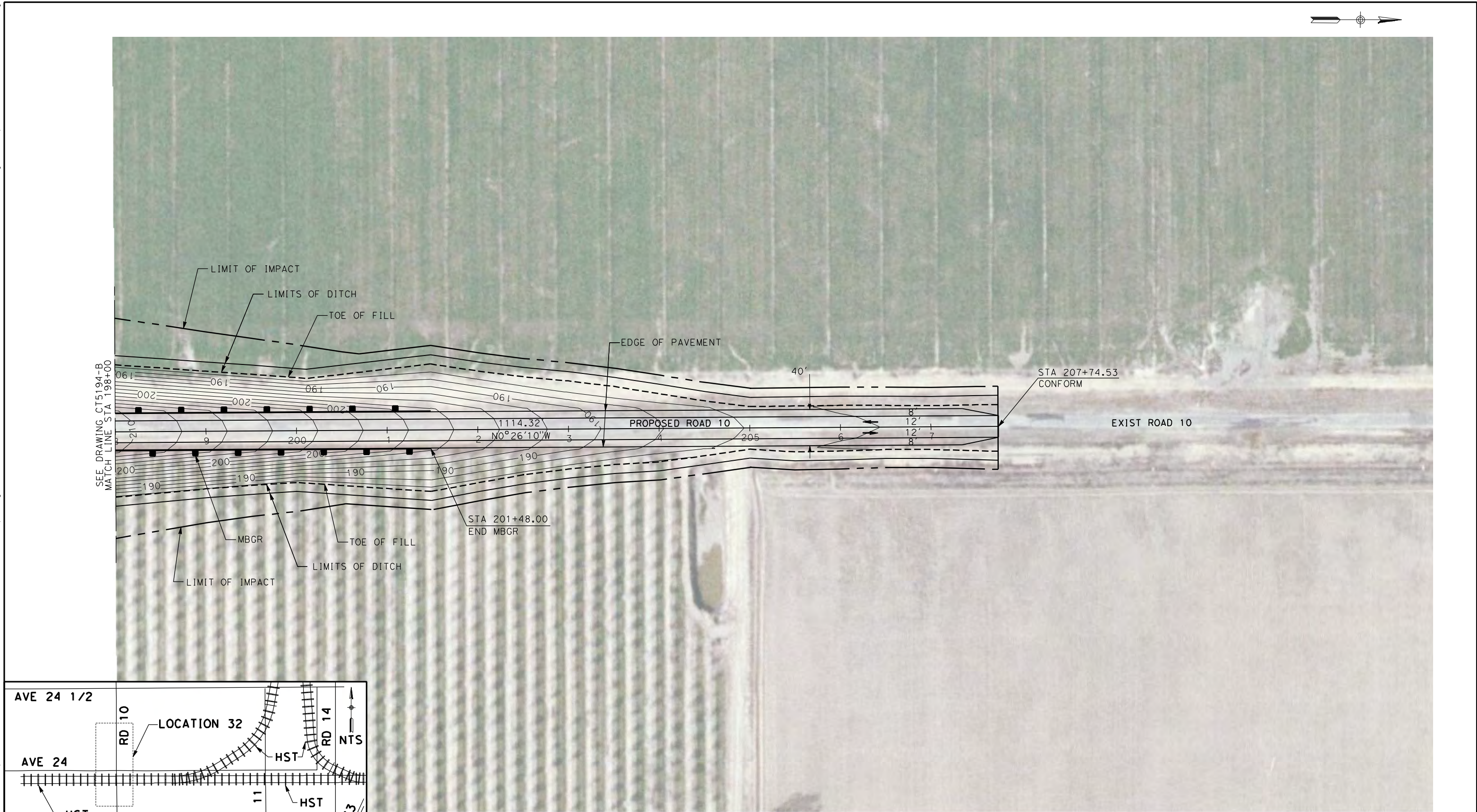
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPRR/SR99 MAINLINE/WYE - (WC)  
GRADE SEPARATION - ROAD 10 ALONG EXIST ALT 2  
LAYOUT  
SHEET 2 OF 3

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5194-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###

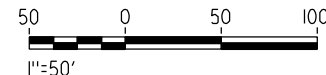




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**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6191-B THROUGH CT6193-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



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2020 L Street, Suite 300  
Sacramento, CA 95811





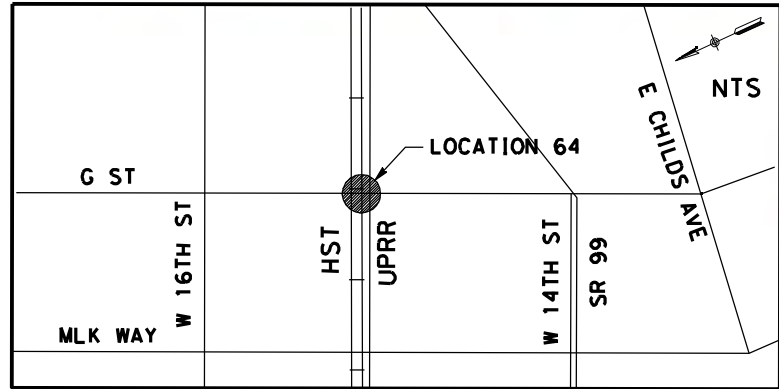
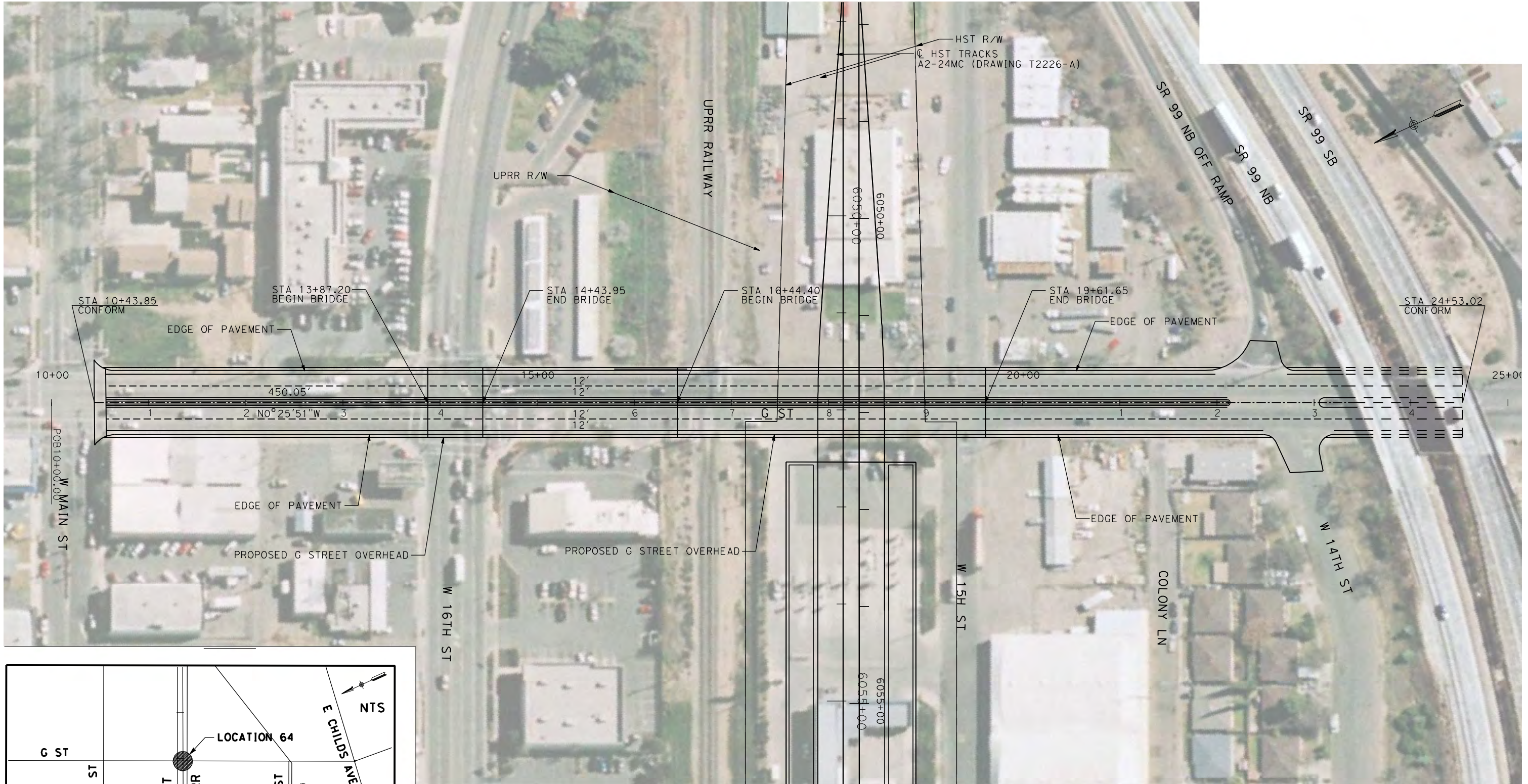
**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE/WYE - (WC)  
GRADE SEPARATION - ROAD 10 ALONG EXIST ALT 2  
LAYOUT  
SHEET 3 OF 3

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5195-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



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GibsonR1



NOTE:  
1. FOR ROADWAY PROFILE, SEE DRAWING CT1149-A.



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
R. GIBSON  
DRAWN BY  
H. PHAN  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
07/27/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



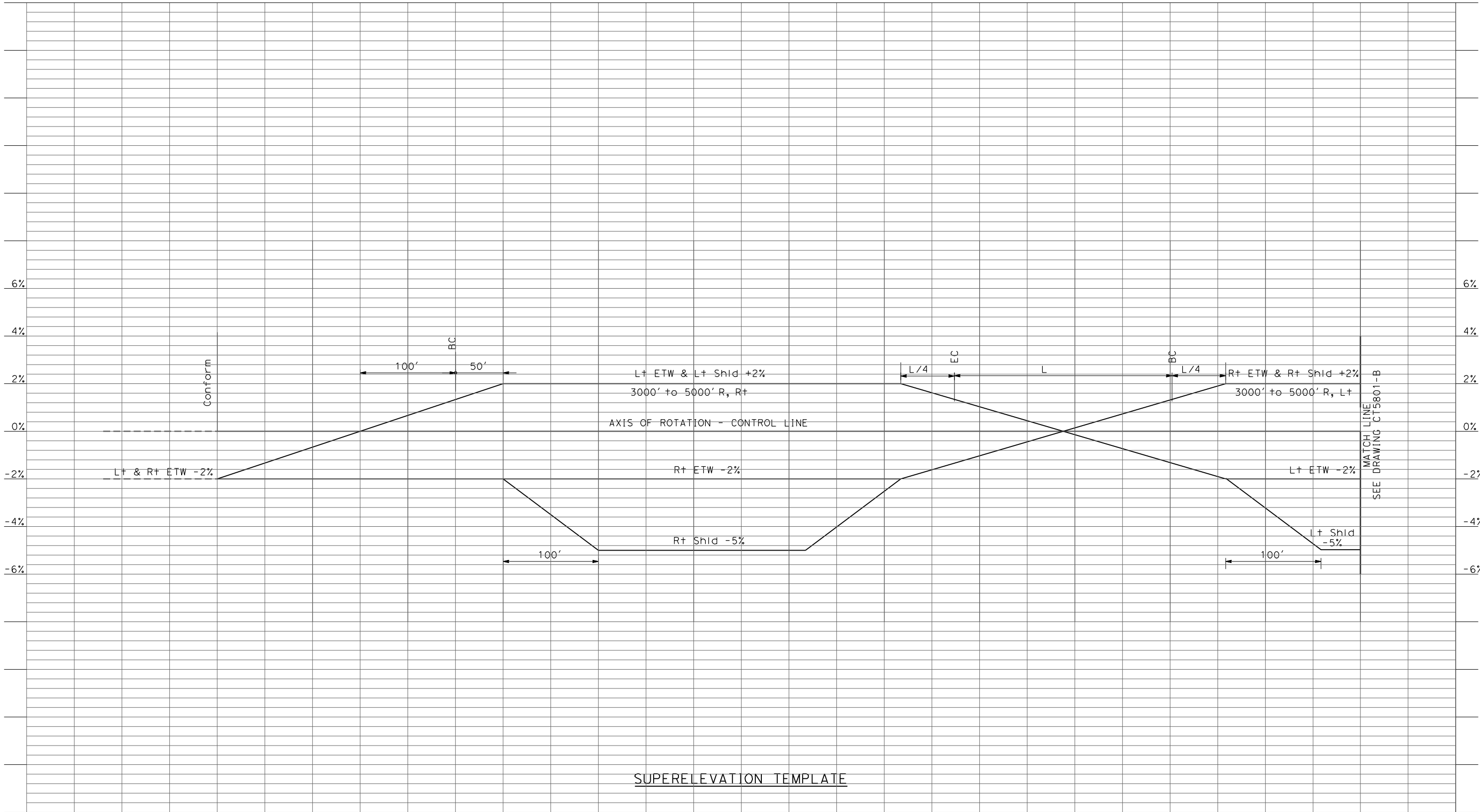
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**MERCED TO FRESNO**  
UPRR MERCED CONNECTOR - (AVE 24/WC)  
GRADE SEPARATION - G STREET  
LAYOUT  
SHEET 1 OF 1

CONTRACT NO.  
HST06-007  
DRAWING NO.  
CT0149-A  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 6:36:04 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT5800-B.dgn

ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY R. LI
DRAWN BY A. TRINH
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**

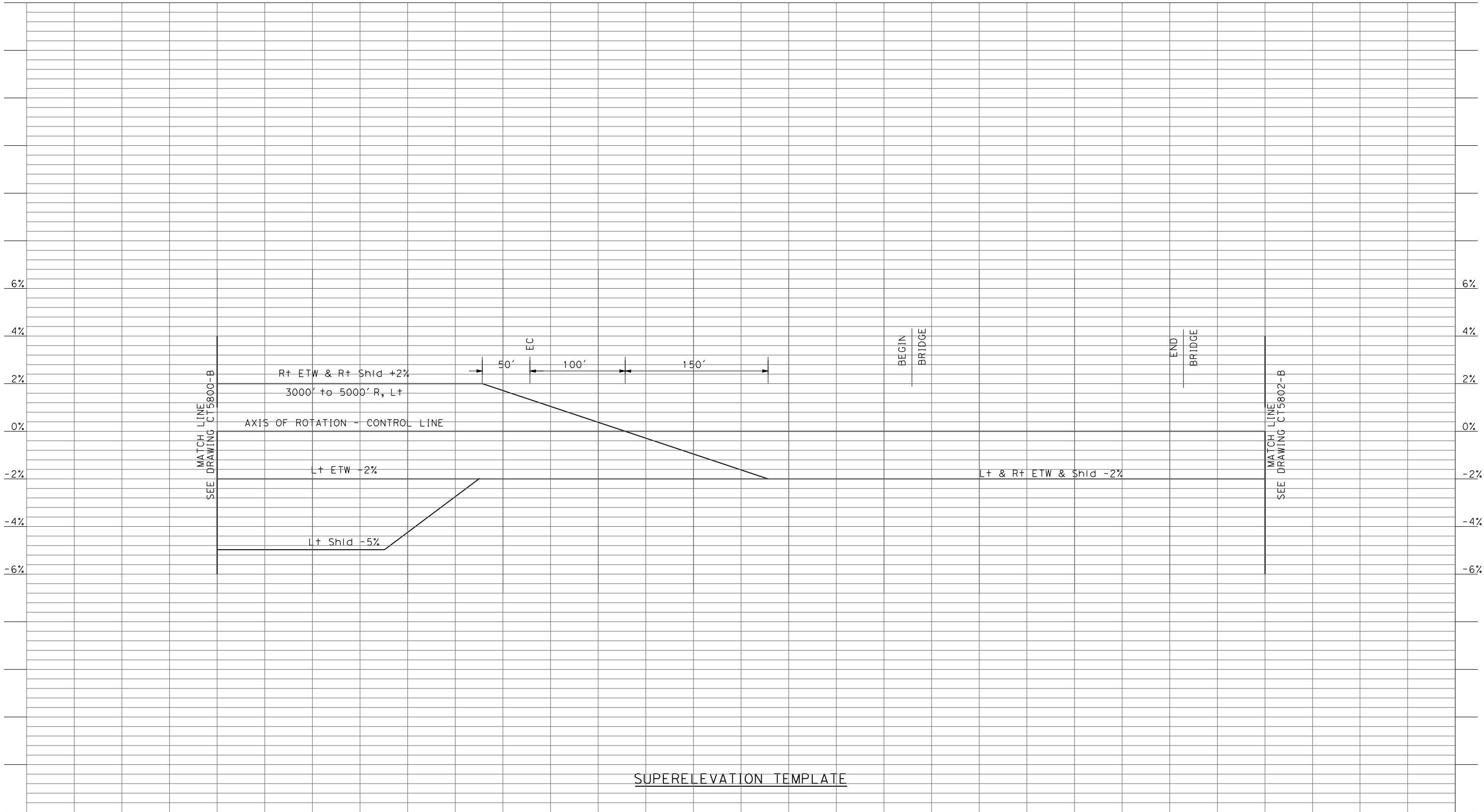


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 - (AVE 24/WC)  
GRADE SEPARATION  
SUPERELEVATION TEMPLATE  
SHEET 1 OF 4

CONTRACT NO. HSR06-007
DRAWING NO. CT5800-B
SCALE AS SHOWN
SHEET NO. ### OF ###



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SUPERELEVATION TEMPLATE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY R. LI
DRAWN BY A. TRINH
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

RECORD SET  
15% DESIGN  
SUBMITTAL

NOT FOR  
CONSTRUCTION



CALIFORNIA  
HIGH-SPEED RAIL AUTHORITY

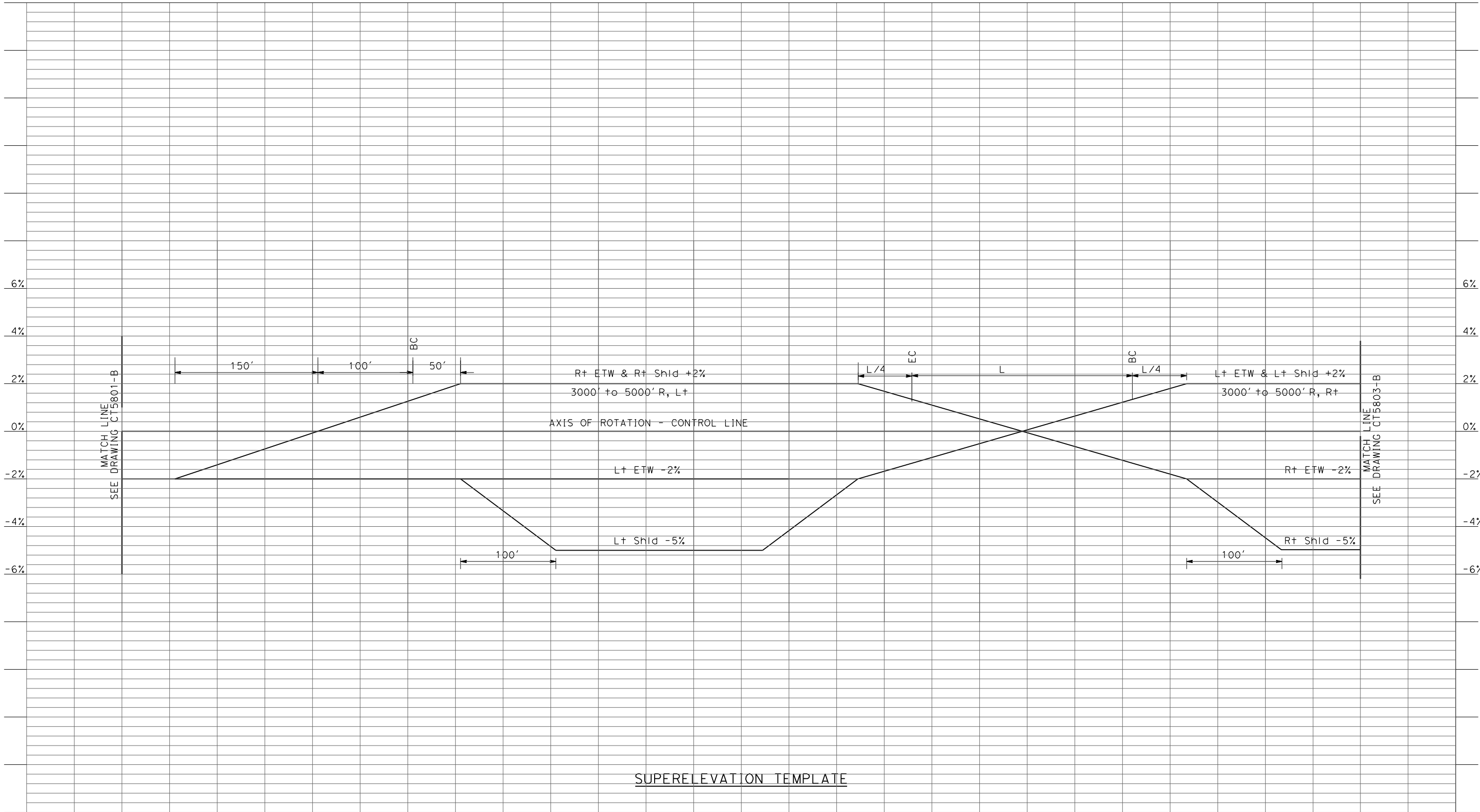
CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO  
UPRR/SR99 - (AVE 24/WC)  
GRADE SEPARATION  
SUPERELEVATION TEMPLATE  
SHEET 2 OF 4

CONTRACT NO. HSR06-007
DRAWING NO. CT5801-B
SCALE AS SHOWN
SHEET NO. ### OF ###



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ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY R. LI
DRAWN BY A. TRINH
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



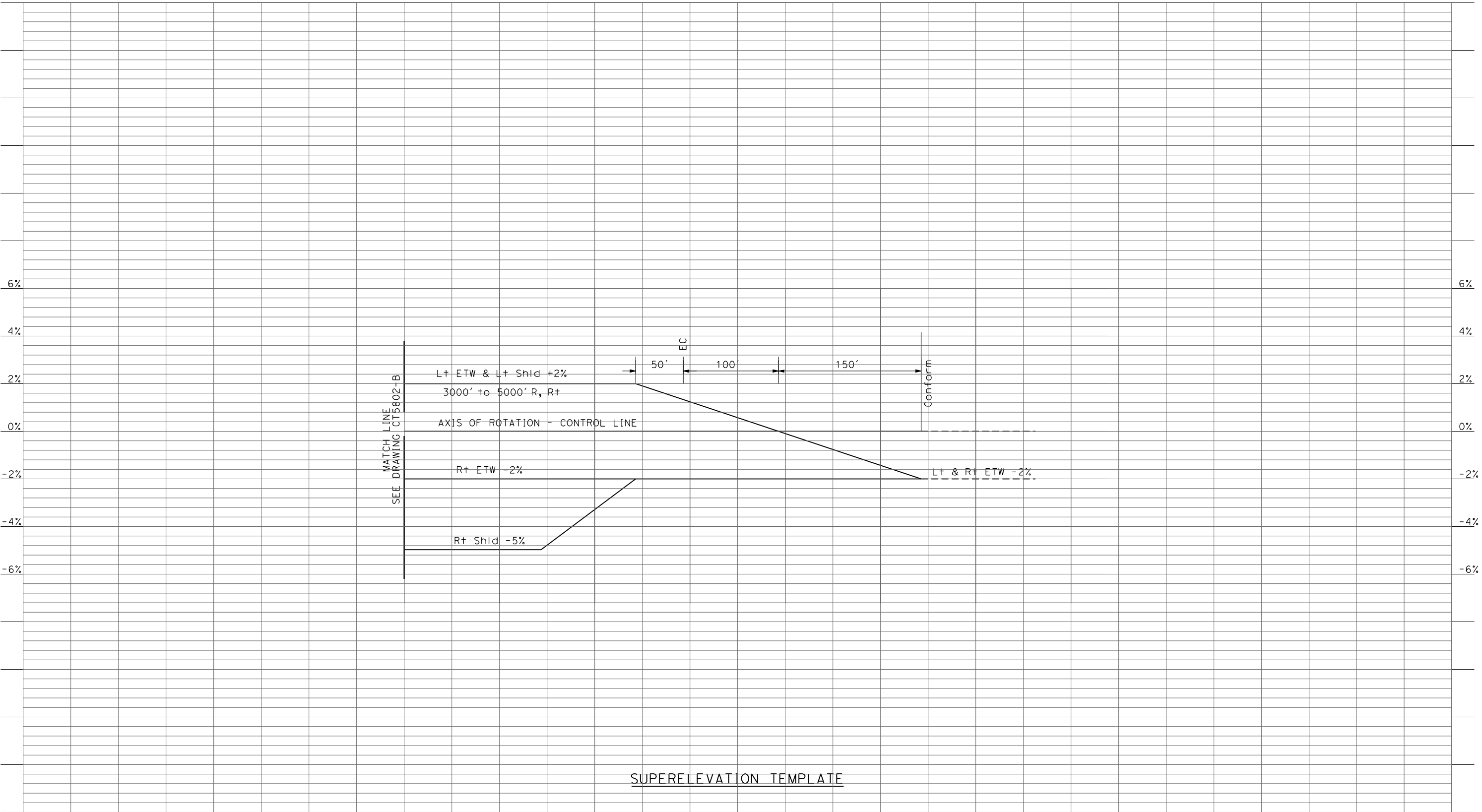
**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 - (AVE 24/WC)  
GRADE SEPARATION  
SUPERELEVATION TEMPLATE  
SHEET 3 OF 4

CONTRACT NO. HSR06-007
DRAWING NO. CT5802-B
SCALE AS SHOWN
SHEET NO. ### OF ###



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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY R. LI
DRAWN BY A. TRINH
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

RECORD SET  
15% DESIGN  
SUBMITTAL

NOT FOR  
CONSTRUCTION



CALIFORNIA  
HIGH-SPEED RAIL AUTHORITY

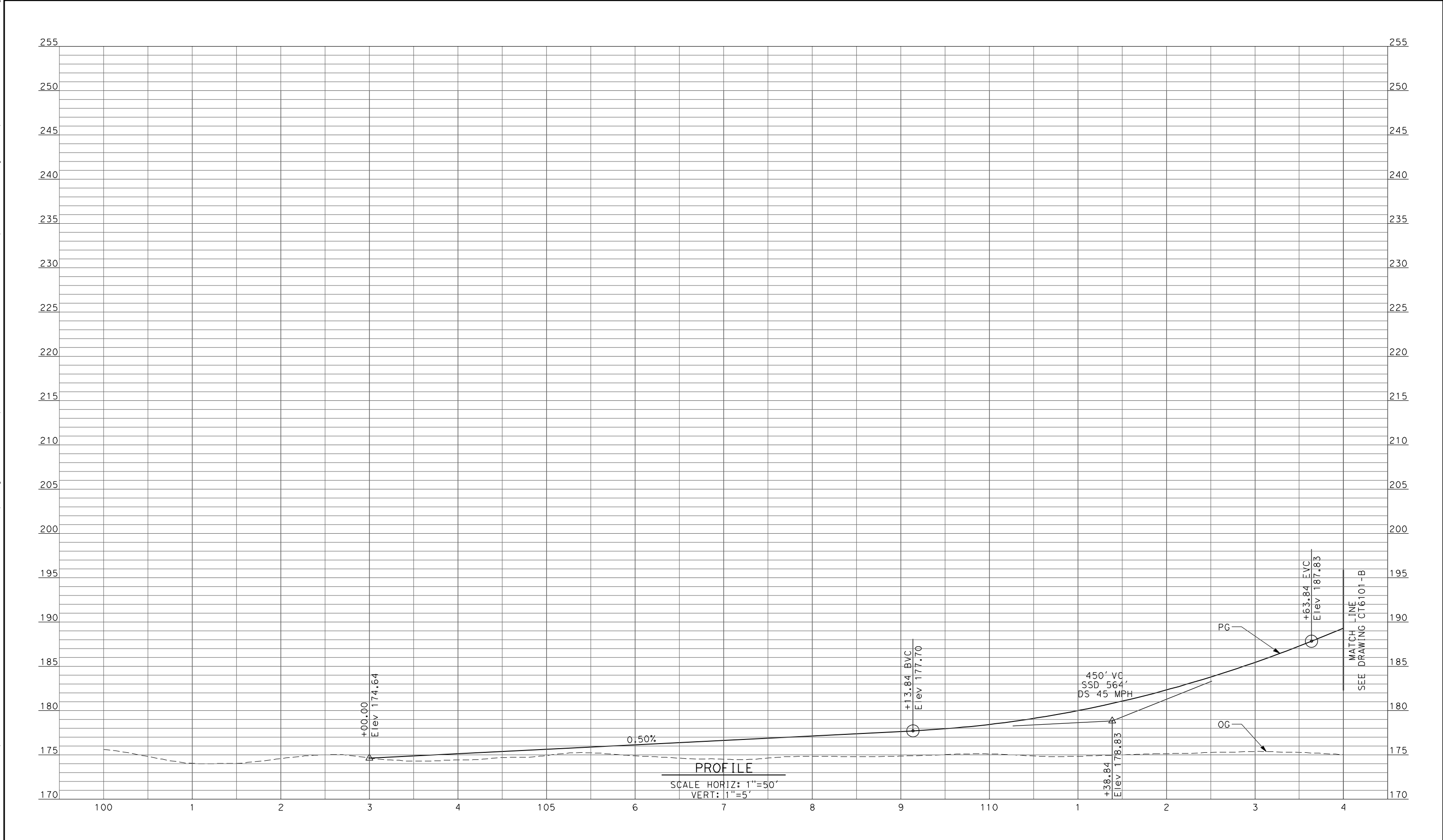
CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO  
UPRR/SR99 - (AVE 24/WC)  
GRADE SEPARATION  
SUPERELEVATION TEMPLATE  
SHEET 4 OF 4

CONTRACT NO. HSR06-007
DRAWING NO. CT5803-B
SCALE AS SHOWN
SHEET NO. ### OF ###



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ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



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2020 L Street, Suite 300  
Sacramento, CA 95811





**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**

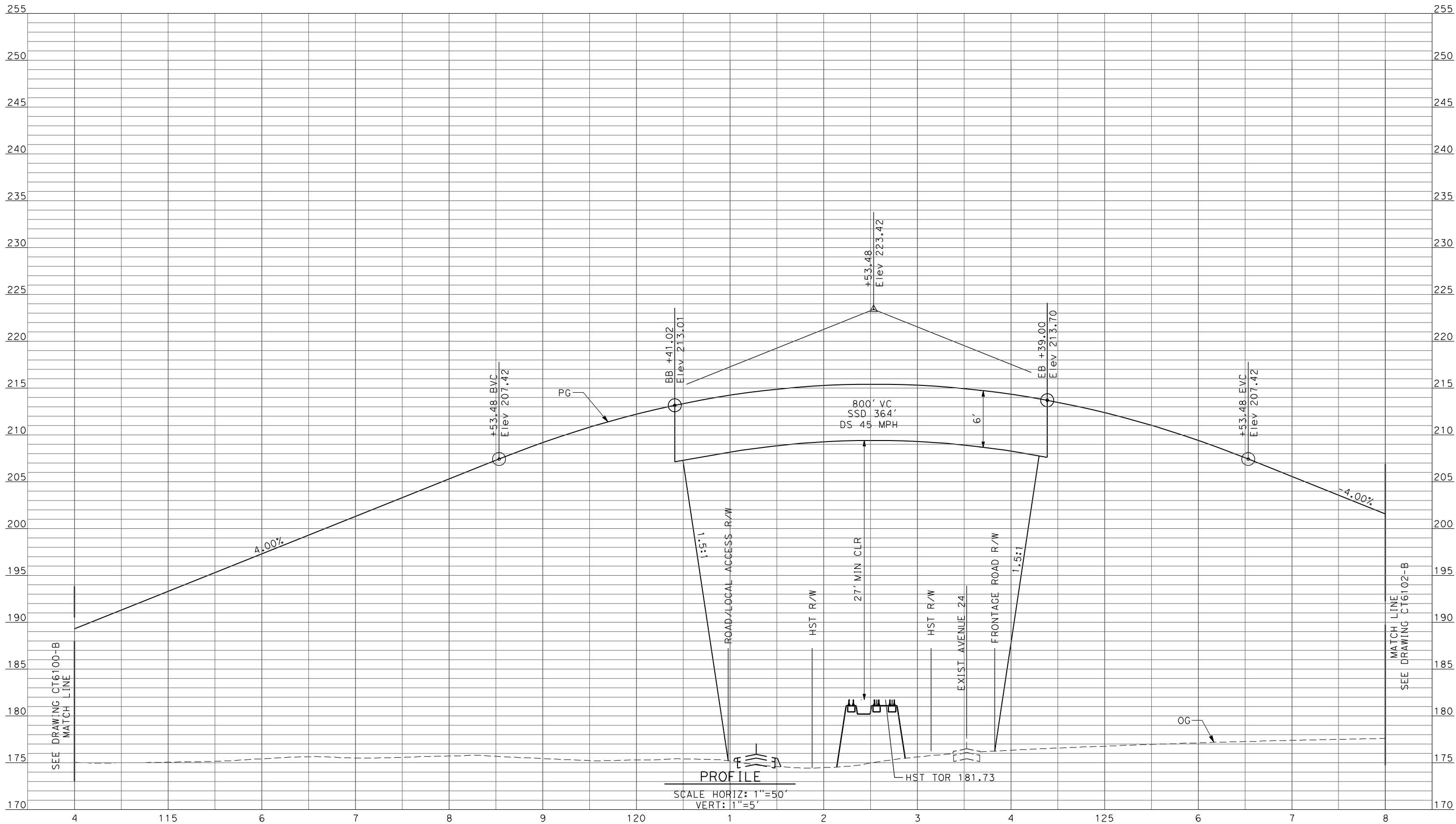
UPRR/SR99 MAINLINE/WYE - (AVE 24/WC)  
GRADE SEPARATION - HEMLOCK RD (ROAD 9) ALT 1  
PROFILE  
SHEET 1 OF 4

CONTRACT NO. HSR06-007
DRAWING NO. CT6100-B
SCALE AS SHOWN
SHEET NO. ### OF ###



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ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

RECORD SET  
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Sacramento, CA 95811  
**CH2MHILL**



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HIGH-SPEED RAIL AUTHORITY

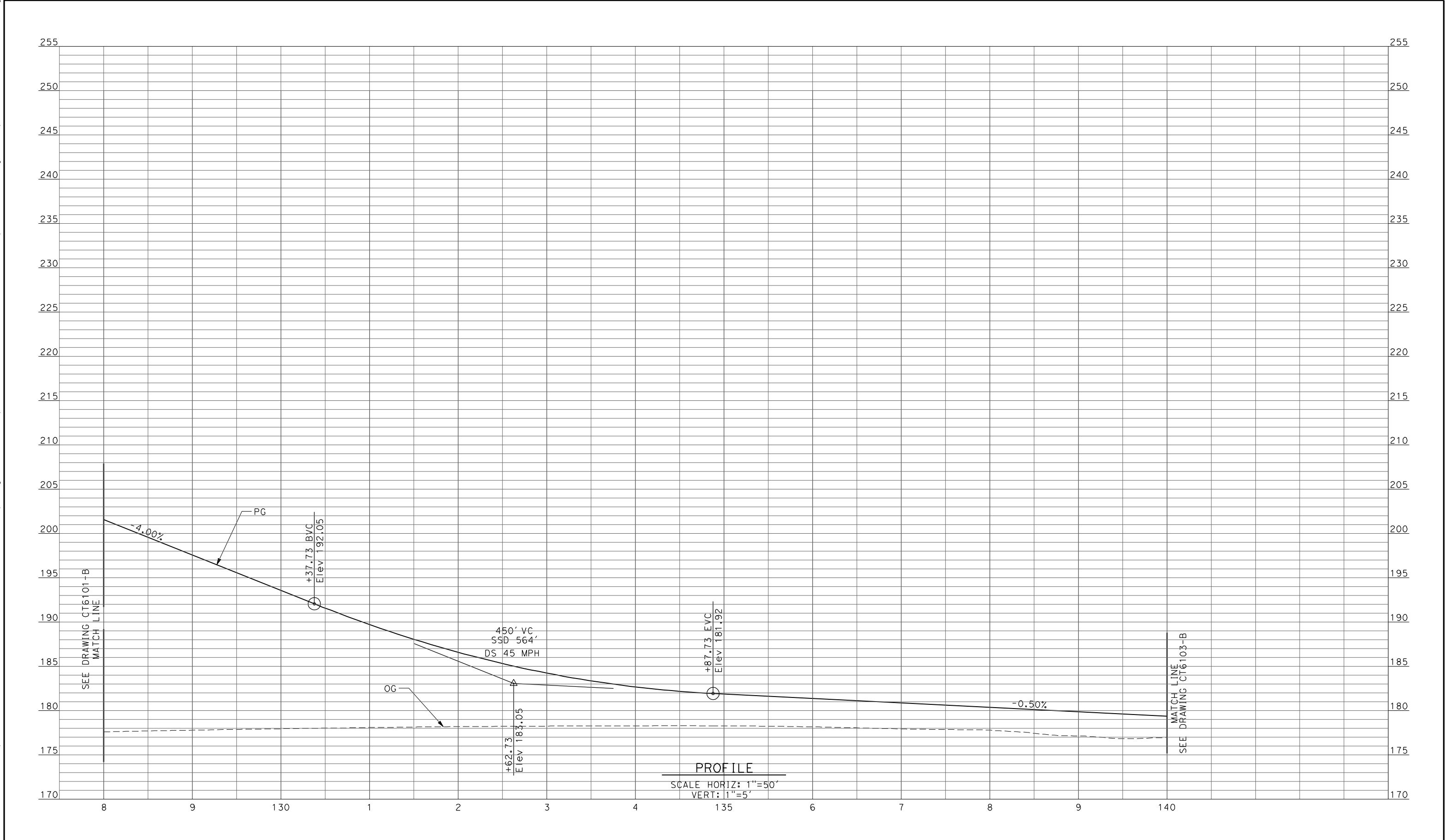
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPRR/SR99 MAINLINE/WYE - (AVE 24/WC)  
GRADE SEPARATION - HEMLOCK RD (ROAD 9) ALT 1  
PROFILE  
SHEET 2 OF 4

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT6101-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



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ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

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2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2MHILL**



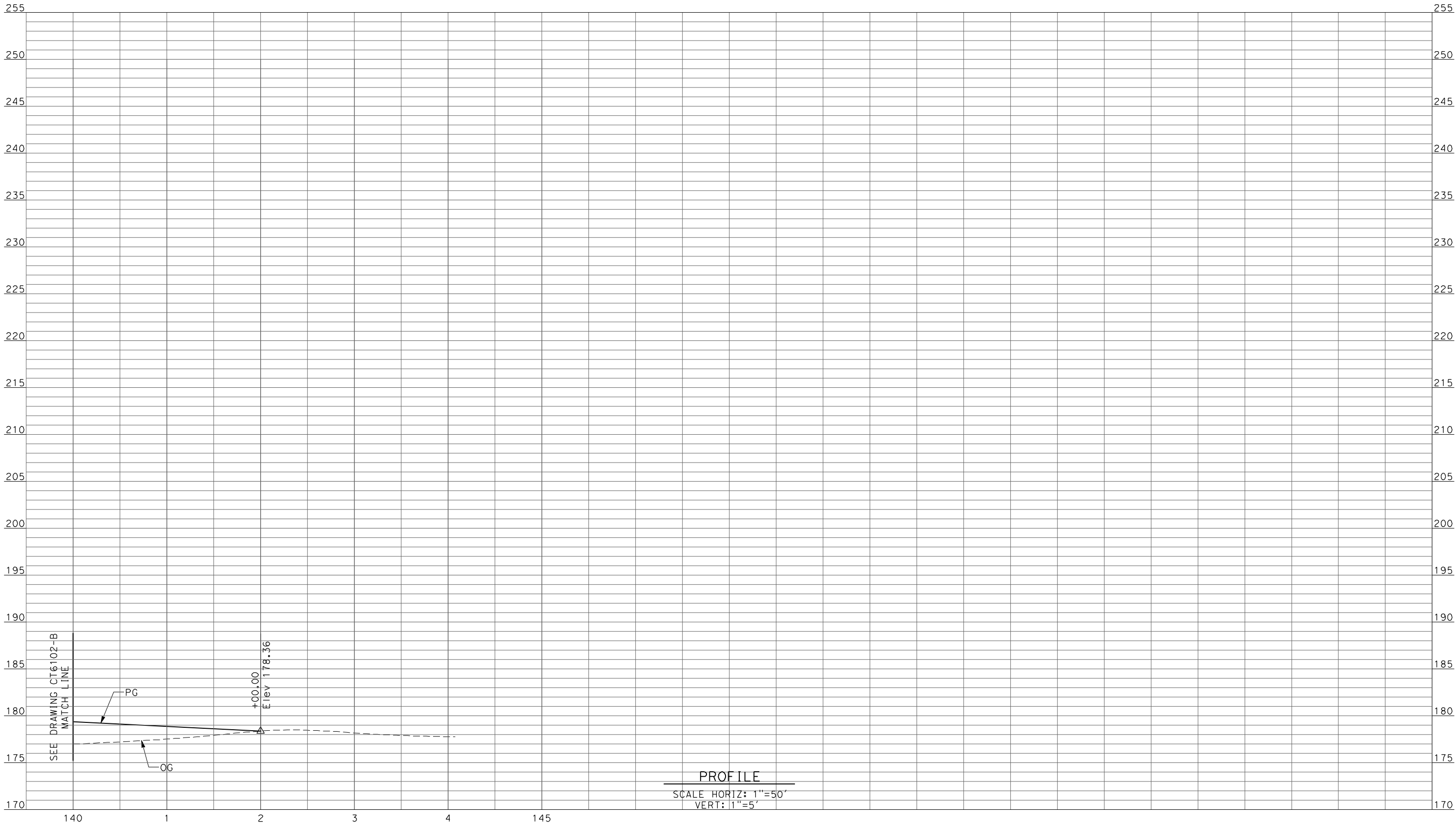
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**

UPRR/SR99 MAINLINE/WYE - (AVE 24/WC)  
GRADE SEPARATION - HEMLOCK RD (ROAD 9) ALT 1  
PROFILE  
SHEET 3 OF 4

CONTRACT NO. HSR06-007
DRAWING NO. CT6102-B
SCALE AS SHOWN
SHEET NO. ### OF ###



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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

RECORD SET  
15% DESIGN  
SUBMITTAL

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CONSTRUCTION



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HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO

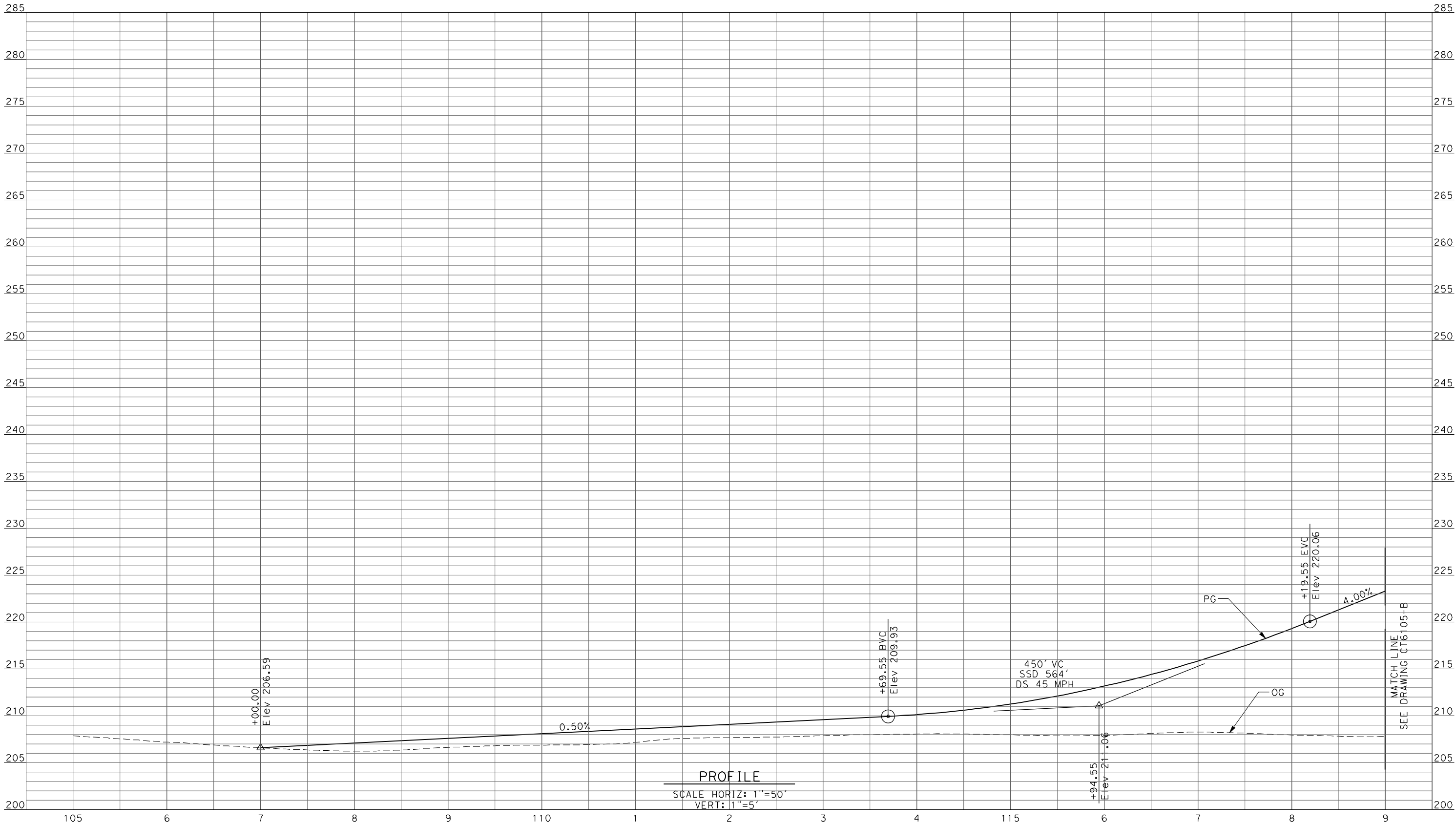
UPRR/SR99 MAINLINE/WYE - (AVE 24/WC)  
GRADE SEPARATION - HEMLOCK RD (ROAD 9) ALT 1  
PROFILE  
SHEET 4 OF 4

CONTRACT NO. HSR06-007
DRAWING NO. CT6103-B
SCALE AS SHOWN
SHEET NO. ### OF ###



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ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

RECORD SET  
15% DESIGN  
SUBMITTAL

NOT FOR  
CONSTRUCTION

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Sacramento, CA 95811  
**CH2MHILL**

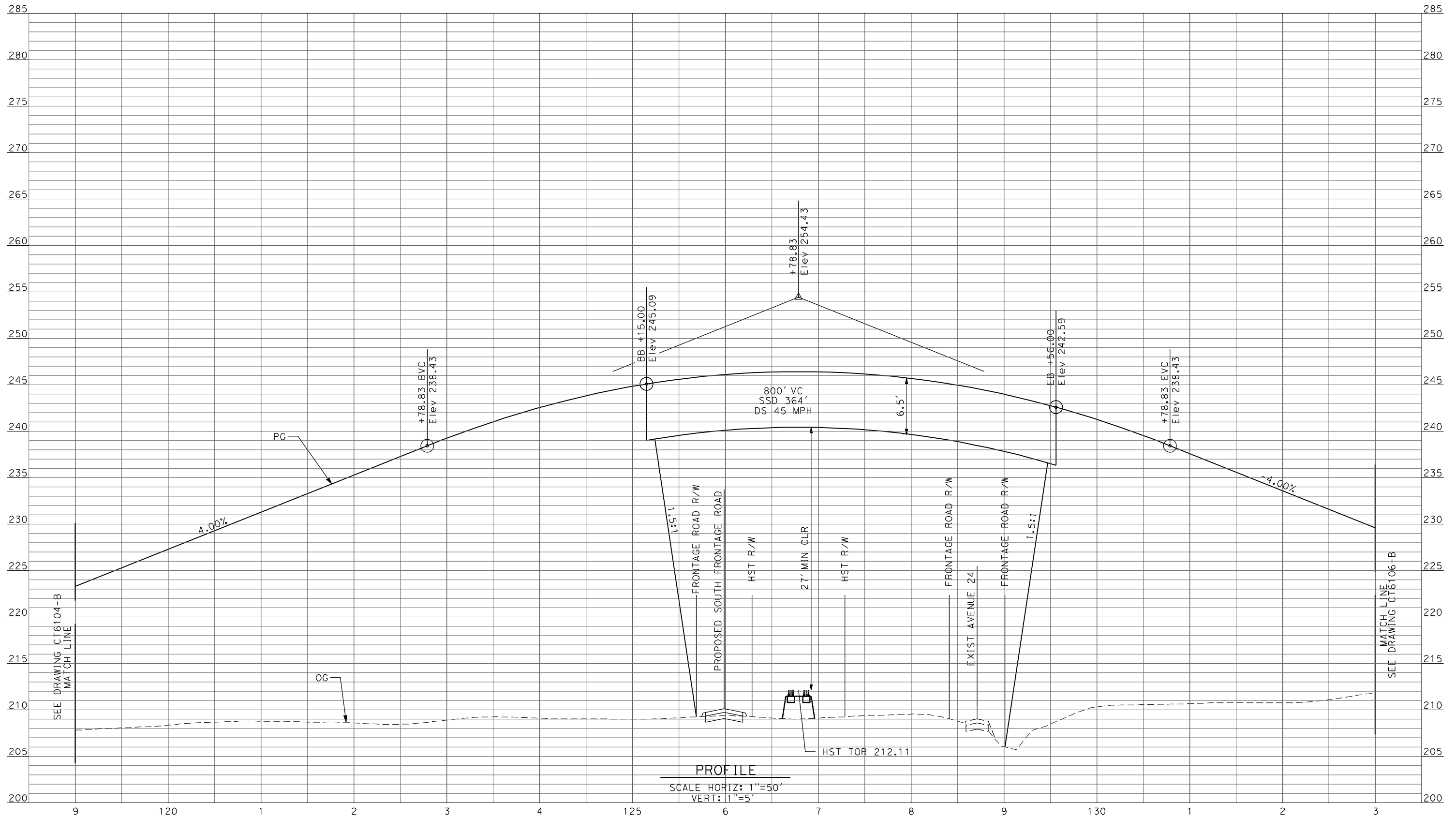


**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPRR/SR99 MAINLINE - (AVE 24)  
GRADE SEPARATION - ROAD 13  
PROFILE  
SHEET 1 OF 4

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT6104-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###





REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY	D. AYELE
DRAWN BY	C. DELOS REYES
CHECKED BY	A. SILVER
IN CHARGE	A. BOONE
DATE	04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

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Sacramento, CA 95811

**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

## CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

UPRR/SR99 MAINLINE - (AVE 24)  
GRADE SEPARATION - ROAD 13

PROFILE  
SHEET 2 OF 4

CONTRACT NO.	HSR06-007
DRAWING NO.	CT6105-B
SCALE	AS SHOWN
SHEET NO.	### OF ###



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ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

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Technical Services, Inc.  
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Sacramento, CA 95811

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**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

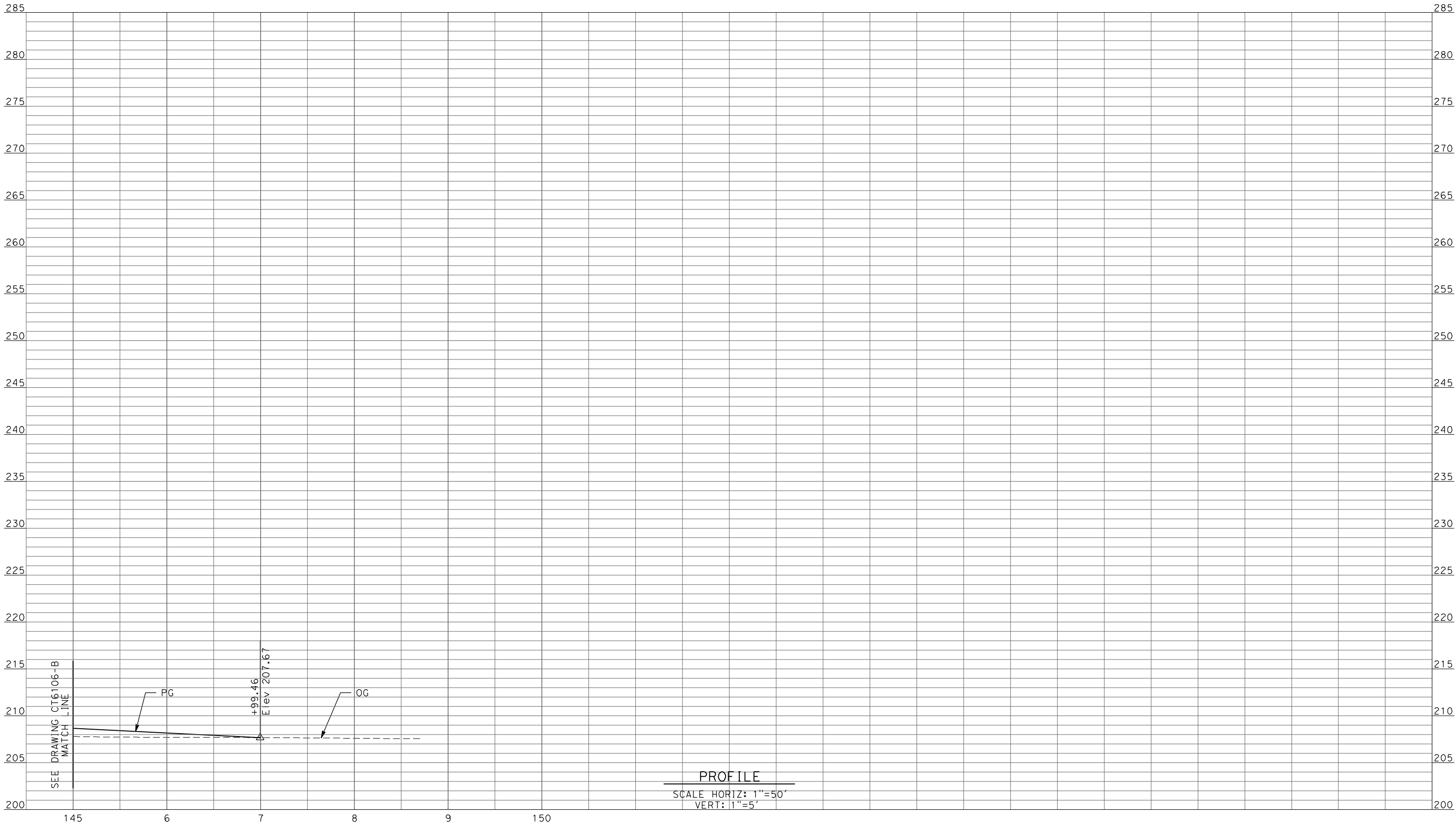
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**

UPRR/SR99 MAINLINE - (AVE 24)  
GRADE SEPARATION - ROAD 13  
PROFILE  
SHEET 3 OF 4

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT6106-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

RECORD SET  
15% DESIGN  
SUBMITTAL

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CALIFORNIA  
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO

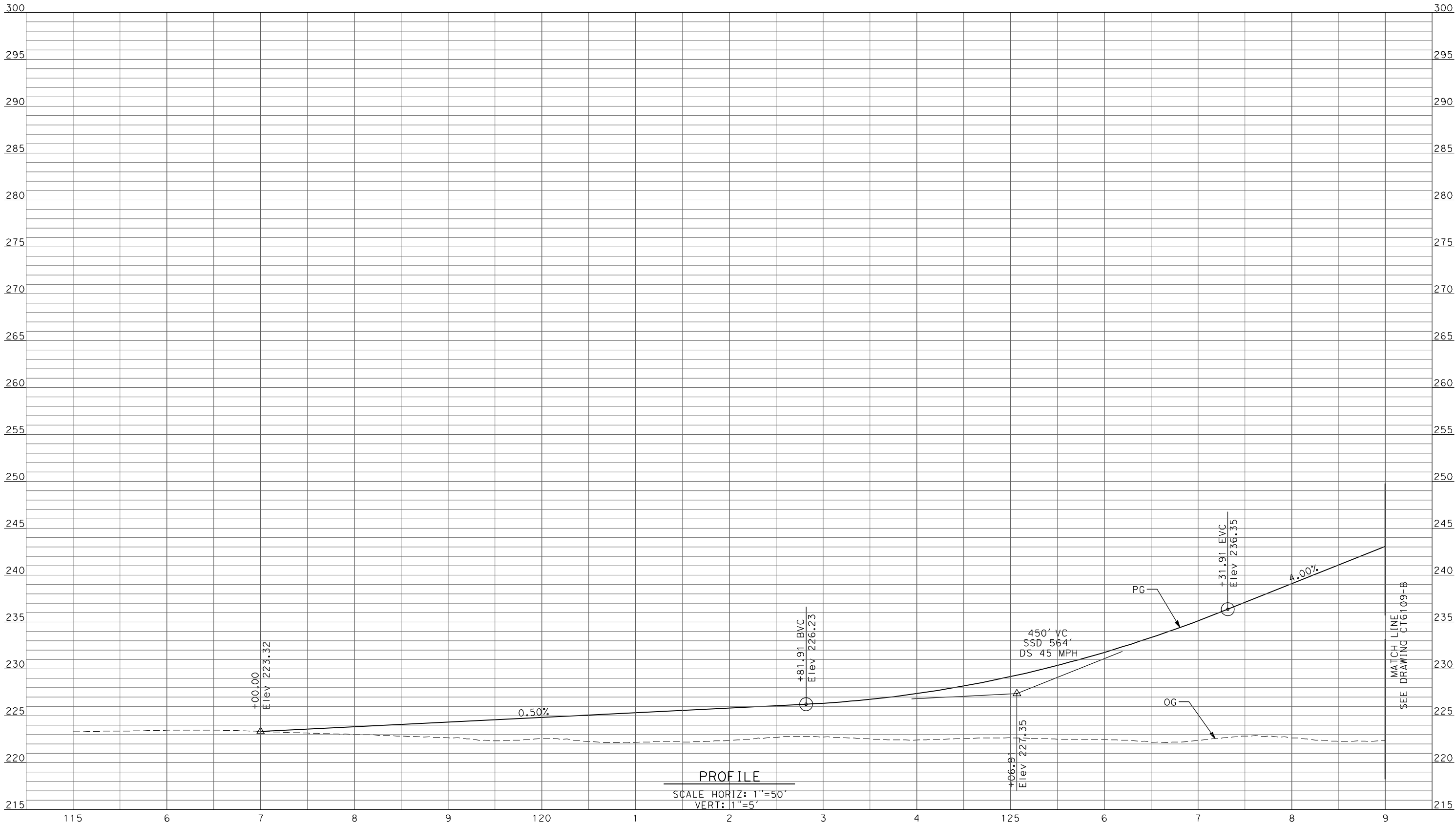
UPRR/SR99 MAINLINE - (AVE 24)  
GRADE SEPARATION - ROAD 13  
PROFILE  
SHEET 4 OF 4

CONTRACT NO. HSR06-007
DRAWING NO. CT6107-B
SCALE AS SHOWN
SHEET NO. ### OF ###



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ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

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CONSTRUCTION**

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Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**

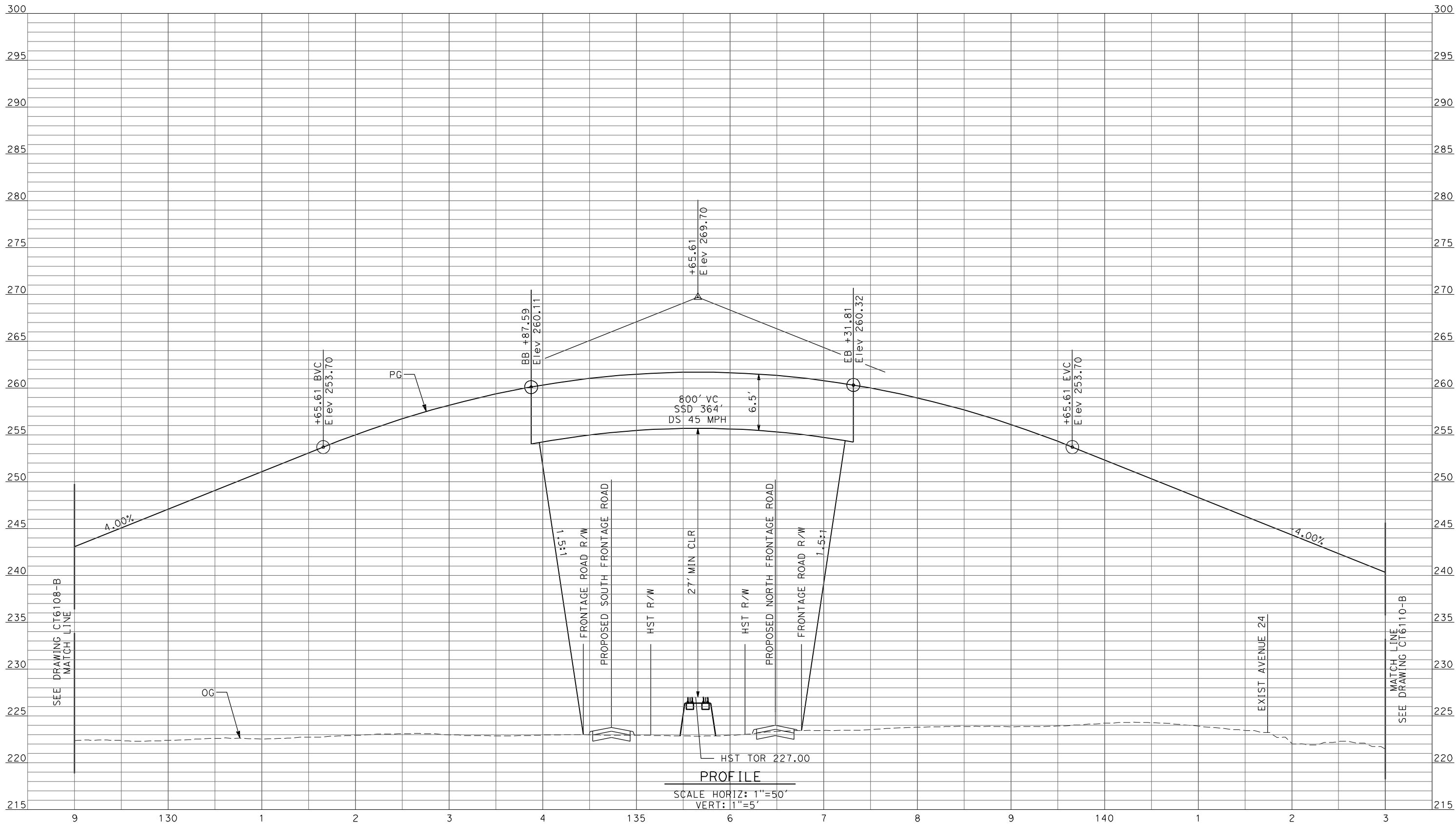
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GRADE SEPARATION - ROAD 15  
PROFILE  
SHEET 1 OF 3

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT6108-B  
SCALE  
AS SHOWN  
SHEET NO.  
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ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

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**CONSTRUCTION**

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Sacramento, CA 95811

**CH2MHILL**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**

UPRR/SR99 MAINLINE - (AVE 24)  
GRADE SEPARATION - ROAD 15  
PROFILE  
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT6109-B
SCALE AS SHOWN
SHEET NO. ### OF ###



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ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

RECORD SET  
15% DESIGN  
SUBMITTAL

NOT FOR  
CONSTRUCTION



CALIFORNIA  
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO

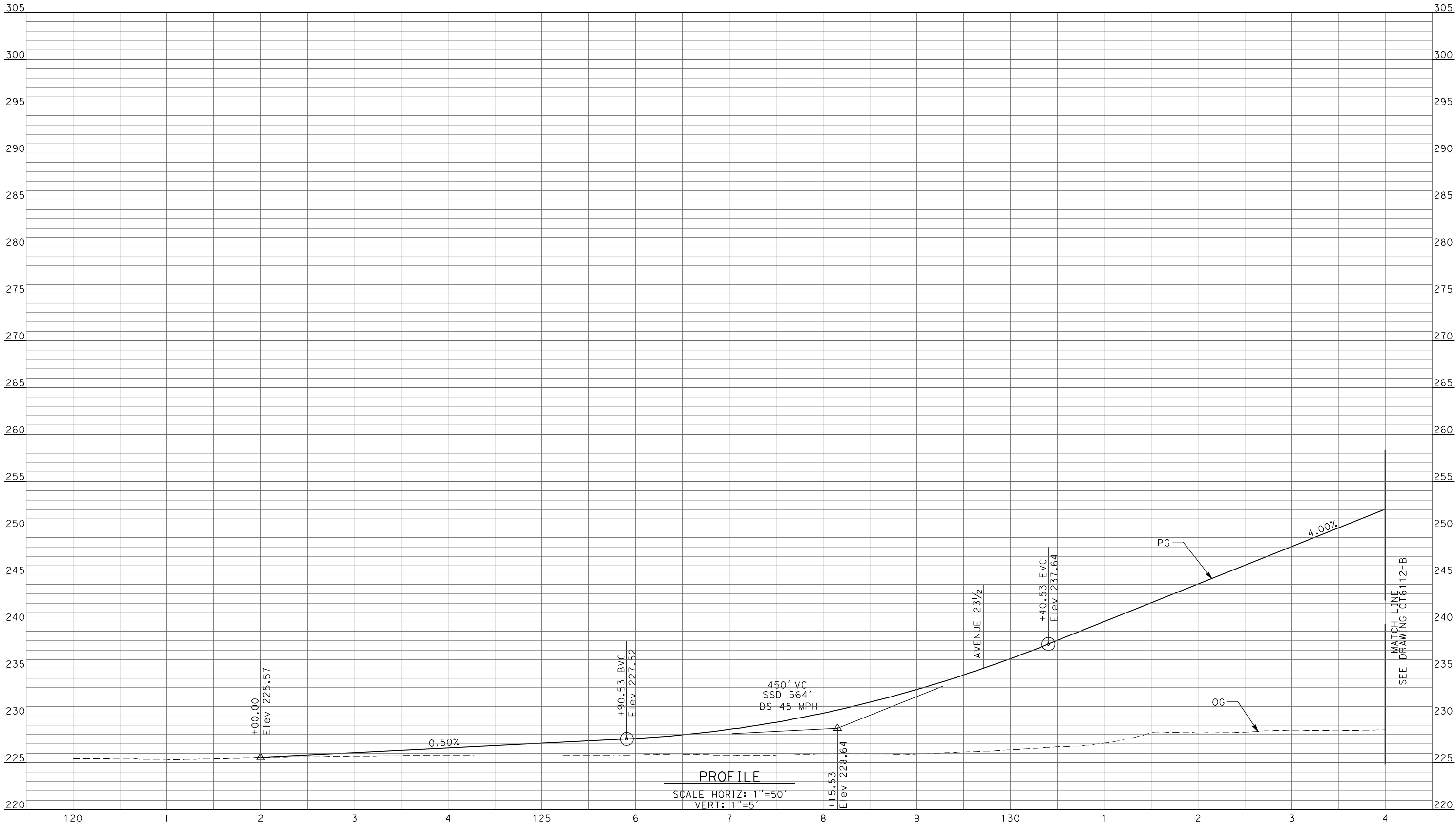
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GRADE SEPARATION - ROAD 15  
PROFILE  
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT6110-B
SCALE AS SHOWN
SHEET NO. ### OF ###



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ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**

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Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

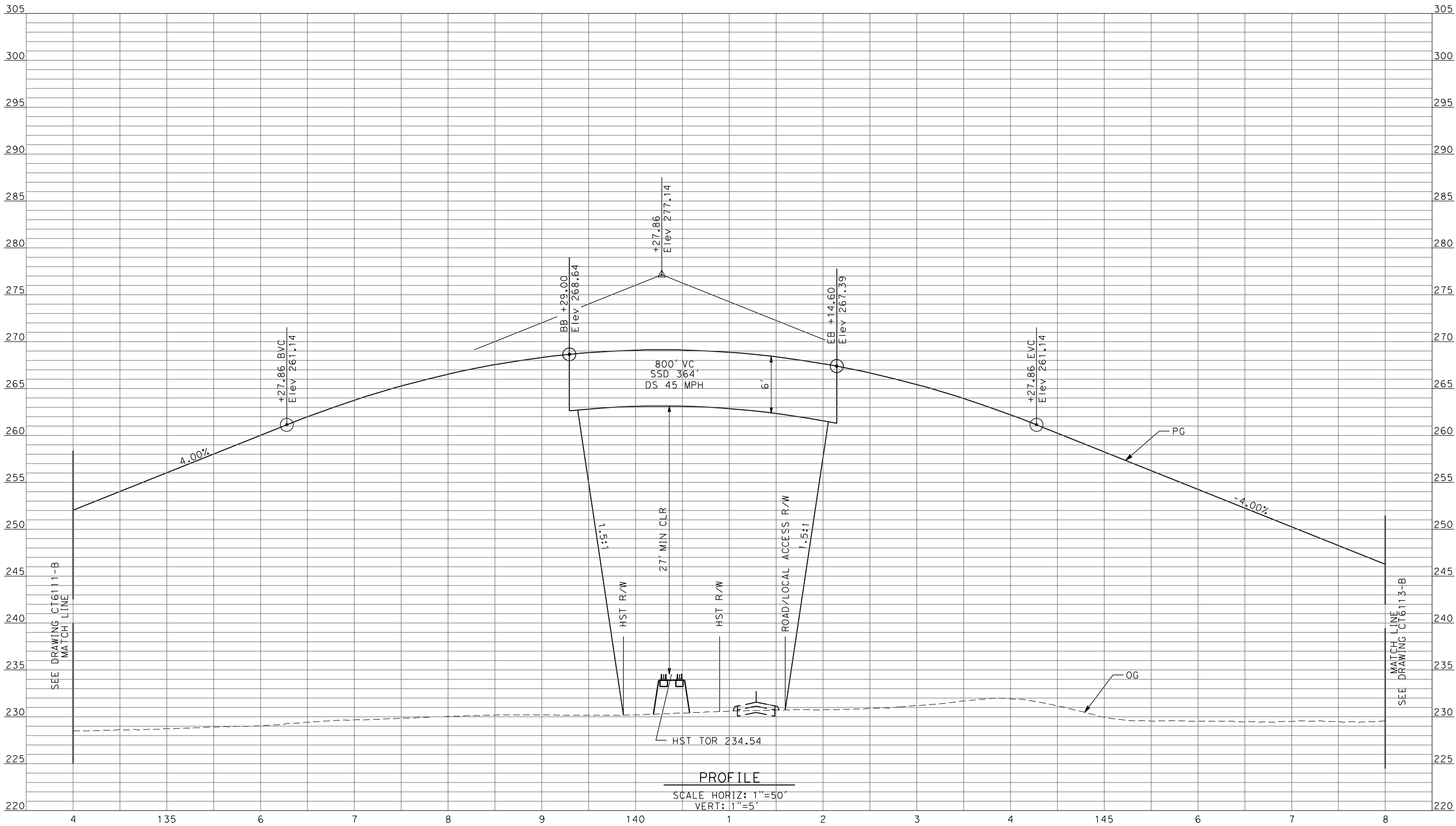
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE - (AVE 24)  
GRADE SEPARATION - ROAD 16  
PROFILE  
SHEET 1 OF 3

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT6111-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



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ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

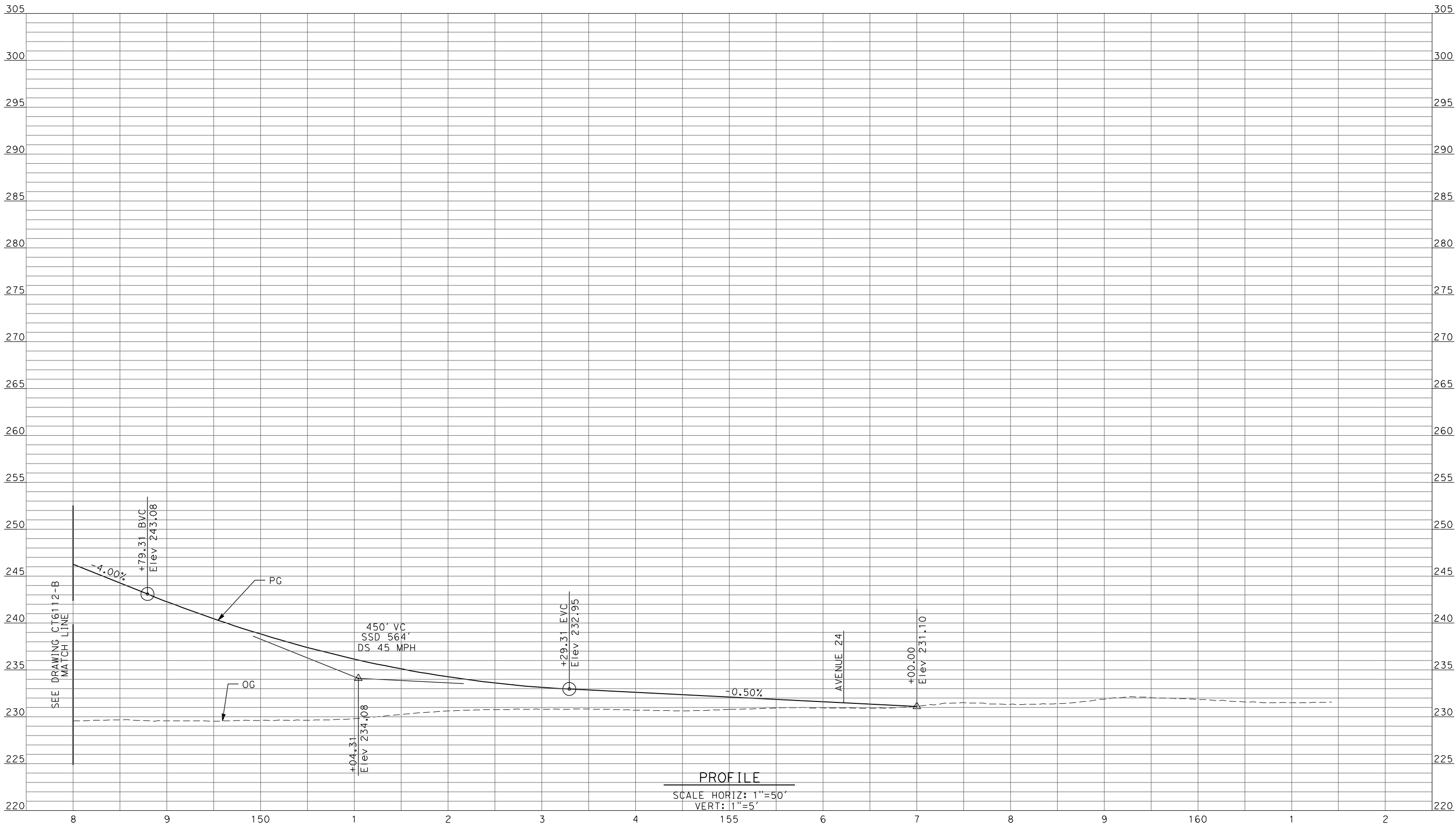
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE - (AVE 24)  
GRADE SEPARATION - ROAD 16  
PROFILE  
SHEET 2 OF 3

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT6112-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



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ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

RECORD SET  
15% DESIGN  
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CONSTRUCTION

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**

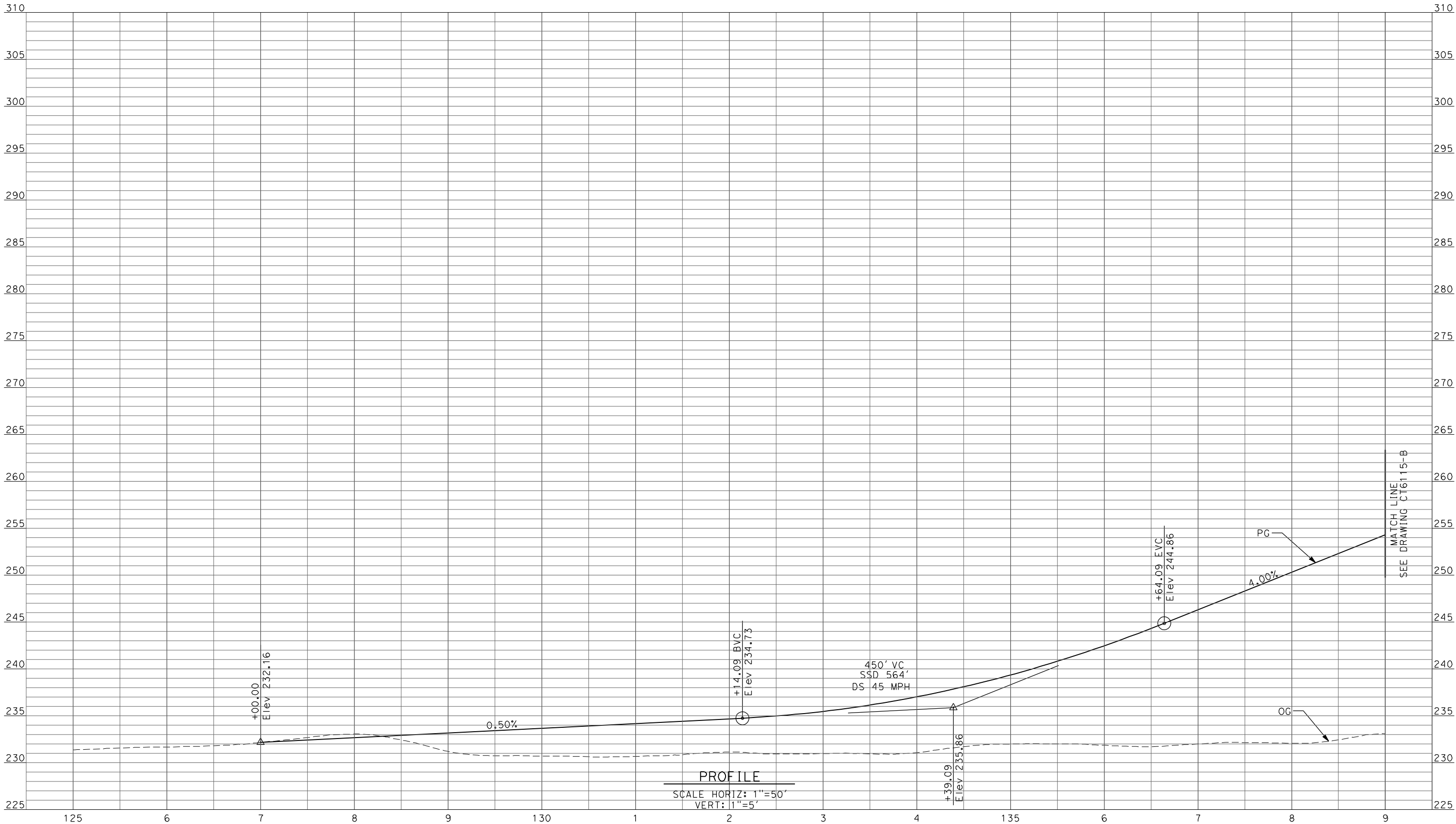
UPRR/SR99 MAINLINE - (AVE 24)  
GRADE SEPARATION - ROAD 16  
PROFILE  
SHEET 3 OF 3

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT6113-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 6:37:07 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6114-B.dgn

ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

RECORD SET  
15% DESIGN  
SUBMITTAL

NOT FOR  
CONSTRUCTION



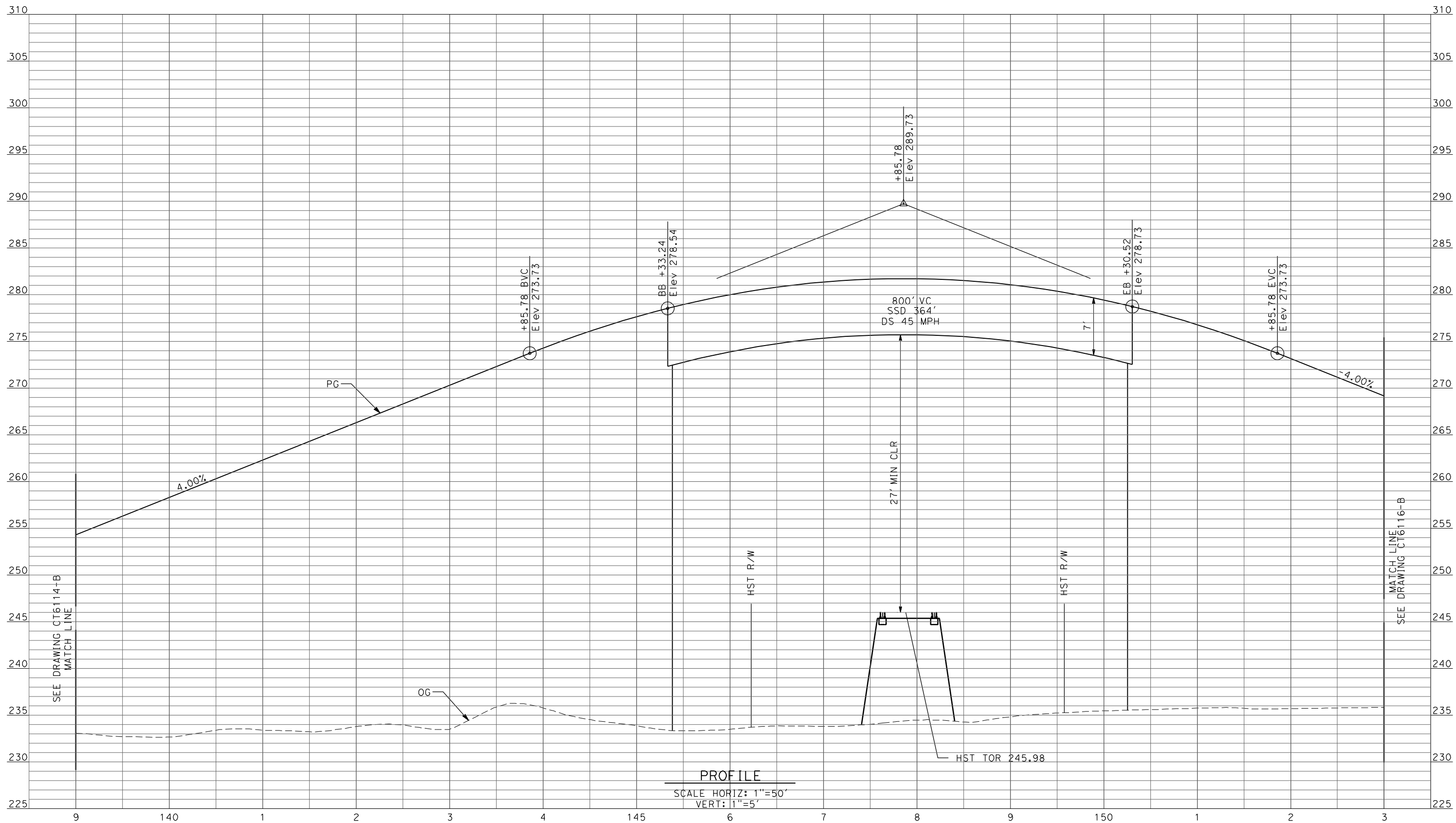
CALIFORNIA  
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO

UPRR/SR99 MAINLINE - (AVE 24)  
GRADE SEPARATION - AVENUE 23 1/2  
PROFILE  
SHEET 1 OF 4

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT6114-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###





REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY	D. AYELE
DRAWN BY	C. DELOS REYES
CHECKED BY	A. SILVER
IN CHARGE	A. BOONE
DATE	04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

## CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

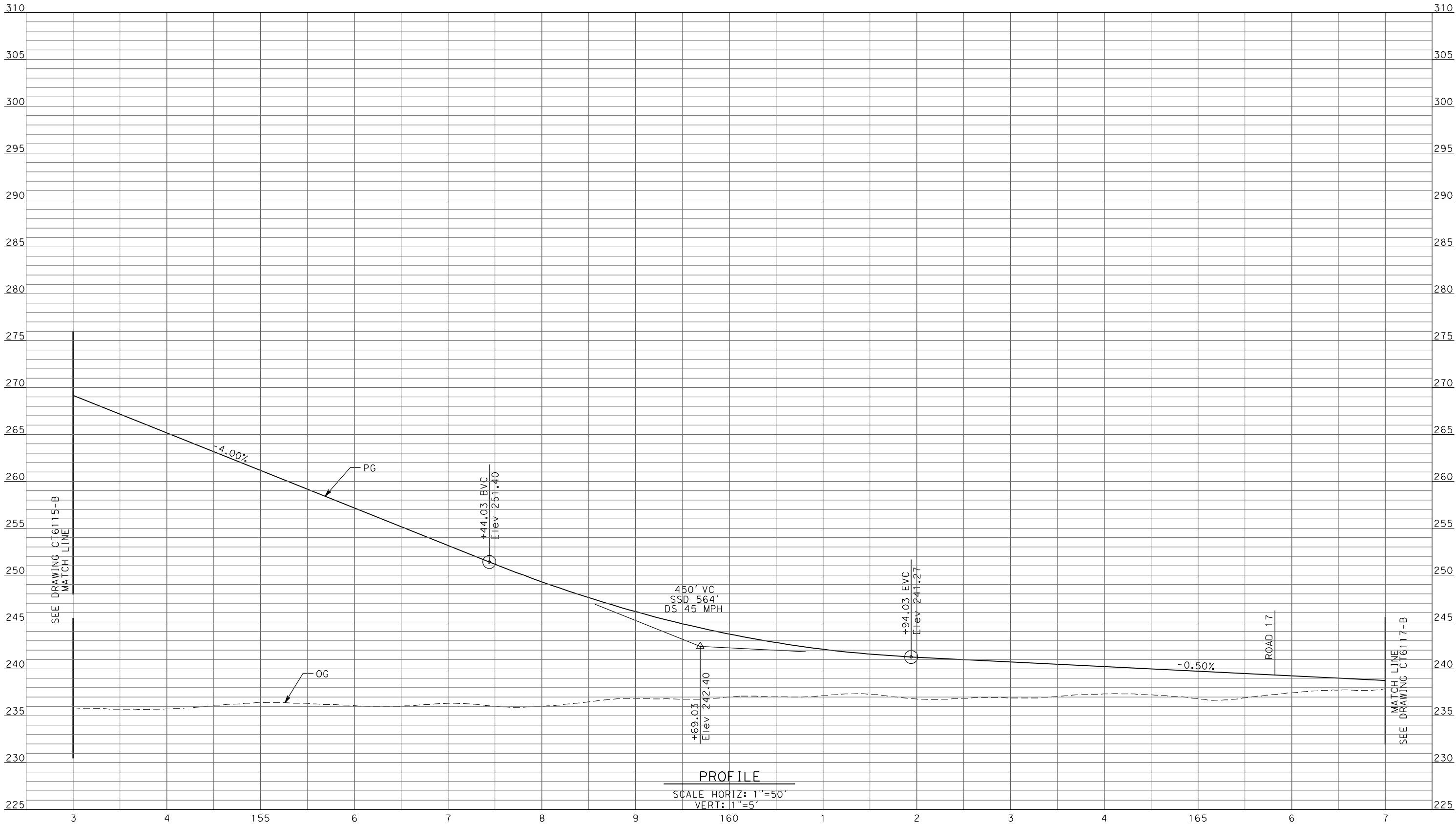
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GRADE SEPARATION - AVENUE 23 1/2  
PROFILE  
SHEET 2 OF 4

CONTRACT NO.	HSR06-007
DRAWING NO.	CT6115-B
SCALE	AS SHOWN
SHEET NO.	### OF ###



4/27/2011 6:37:15 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6116-B.dgn

ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
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**CONSTRUCTION**

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2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

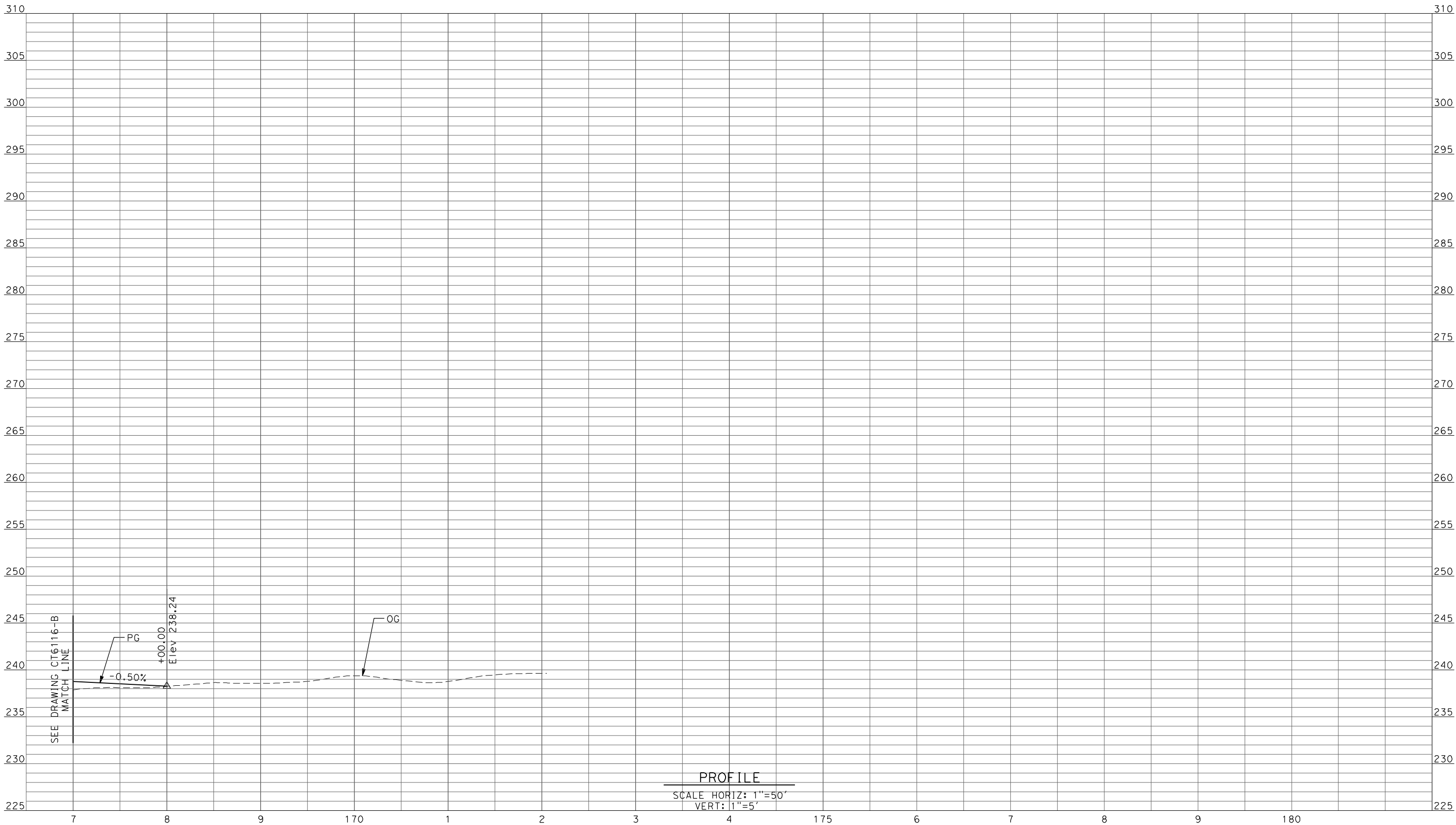
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE - (AVE 24)  
GRADE SEPARATION - AVENUE 23 1/2  
PROFILE  
SHEET 3 OF 4

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT6116-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



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ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

RECORD SET  
15% DESIGN  
SUBMITTAL

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CONSTRUCTION



CALIFORNIA  
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO

UPRR/SR99 MAINLINE - (AVE 24)  
GRADE SEPARATION - AVENUE 23 1/2  
PROFILE  
SHEET 4 OF 4

CONTRACT NO. HSR06-007
DRAWING NO. CT6117-B
SCALE AS SHOWN
SHEET NO. ### OF ###



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ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

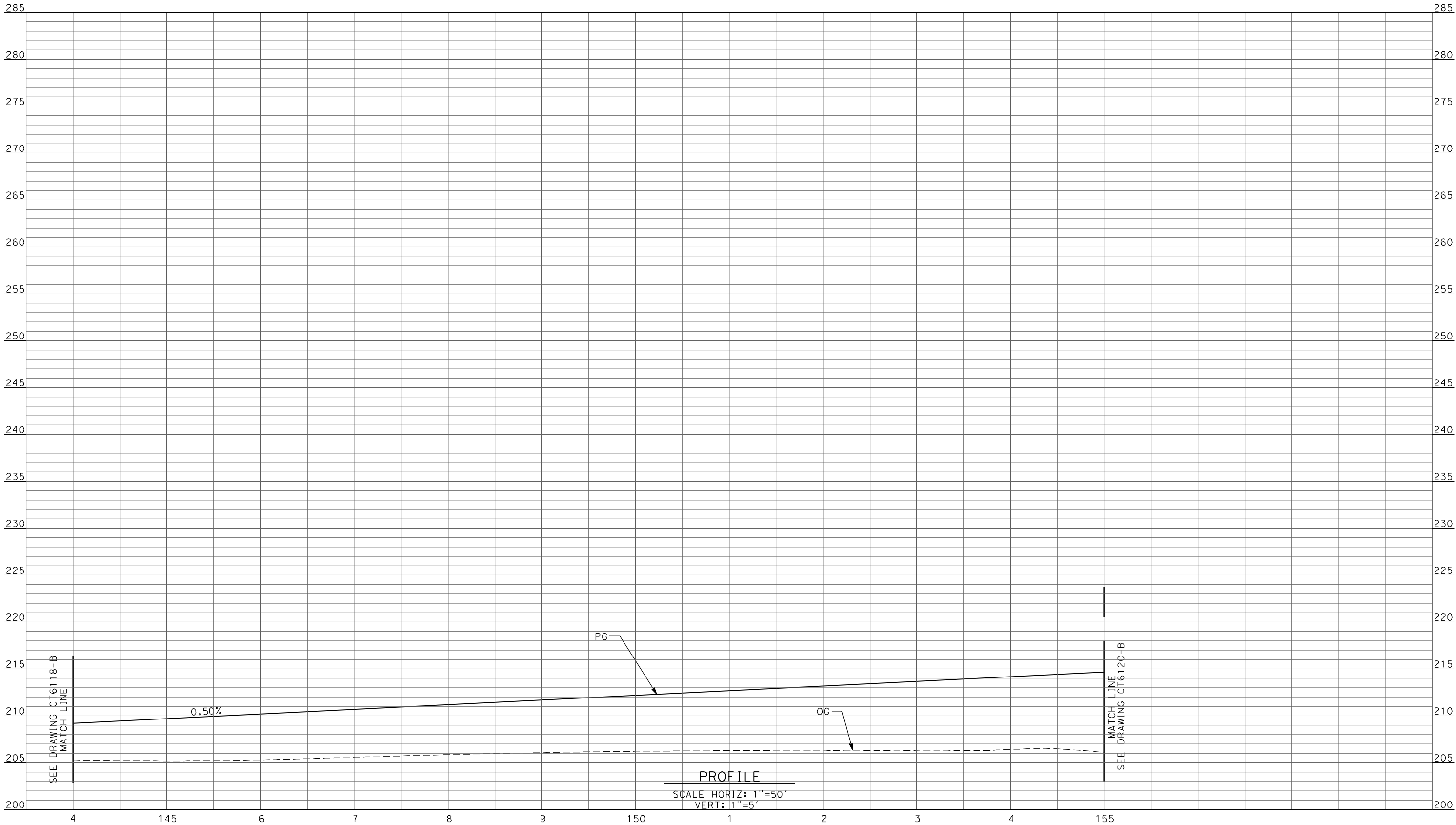
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPRR/SR99 WYE - (AVE 24)  
GRADE SEPARATION - AVENUE 25  
PROFILE  
SHEET 1 OF 5

CONTRACT NO. HSR06-007
DRAWING NO. CT6118-B
SCALE AS SHOWN
SHEET NO. ### OF ###



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ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**

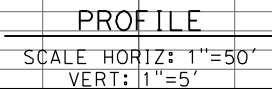


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**

UPRR/SR99 WYE - (AVE 24)  
GRADE SEPARATION - AVENUE 25  
PROFILE  
SHEET 2 OF 5

CONTRACT NO. HSR06-007
DRAWING NO. CT6119-B
SCALE AS SHOWN
SHEET NO. ### OF ###





DESIGNED BY	D. AYELE
DRAWN BY	C. DELOS REYES
CHECKED BY	A. SILVER
IN CHARGE	A. BOONE
DATE	04/29/2011

**NOT FOR  
CONSTRUCTION**

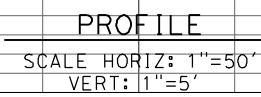


**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

UPRR/SR99 WYE - (AVE 24)  
GRADE SEPARATION - AVENUE 25  
PROFILE  
SHEET 3 OF 5

CONTRACT NO.	HSR06-007
DRAWING NO.	CT6120-B
SCALE	AS SHOWN
SHEET NO.	### OF ###





DESIGNED BY	D. AYELE
DRAWN BY	C. DELOS REYES
CHECKED BY	A. SILVER
IN CHARGE	A. BOONE
DATE	04/29/2011

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**CH2MHILL**



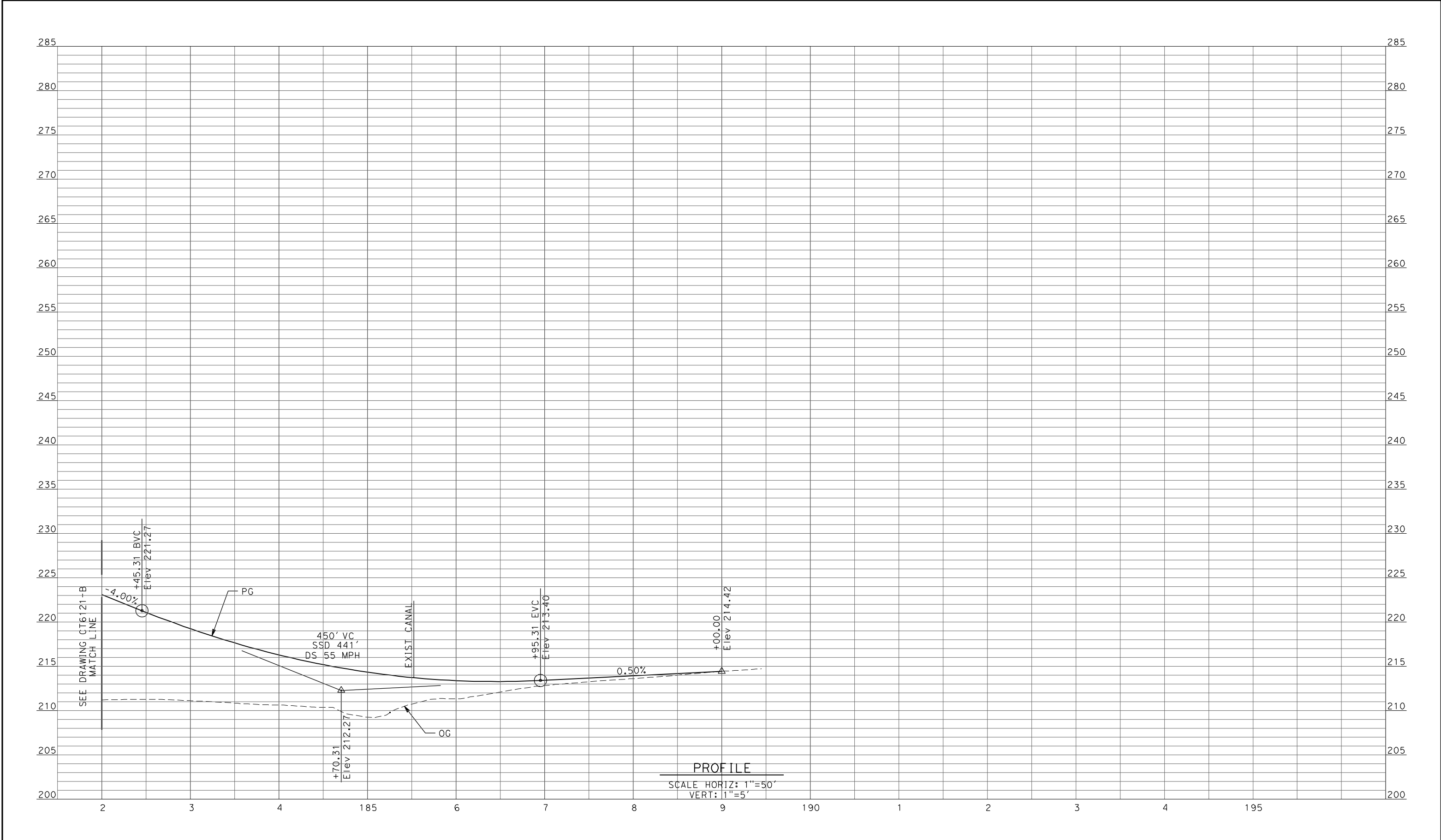
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 WYE - (AVE 24)  
GRADE SEPARATION - AVENUE 25  
PROFILE  
SHEET 4 OF 5

CONTRACT NO.	HSR06-007
DRAWING NO.	CT6121-B
SCALE	AS SHOWN
SHEET NO.	### OF ###



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ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

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**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**

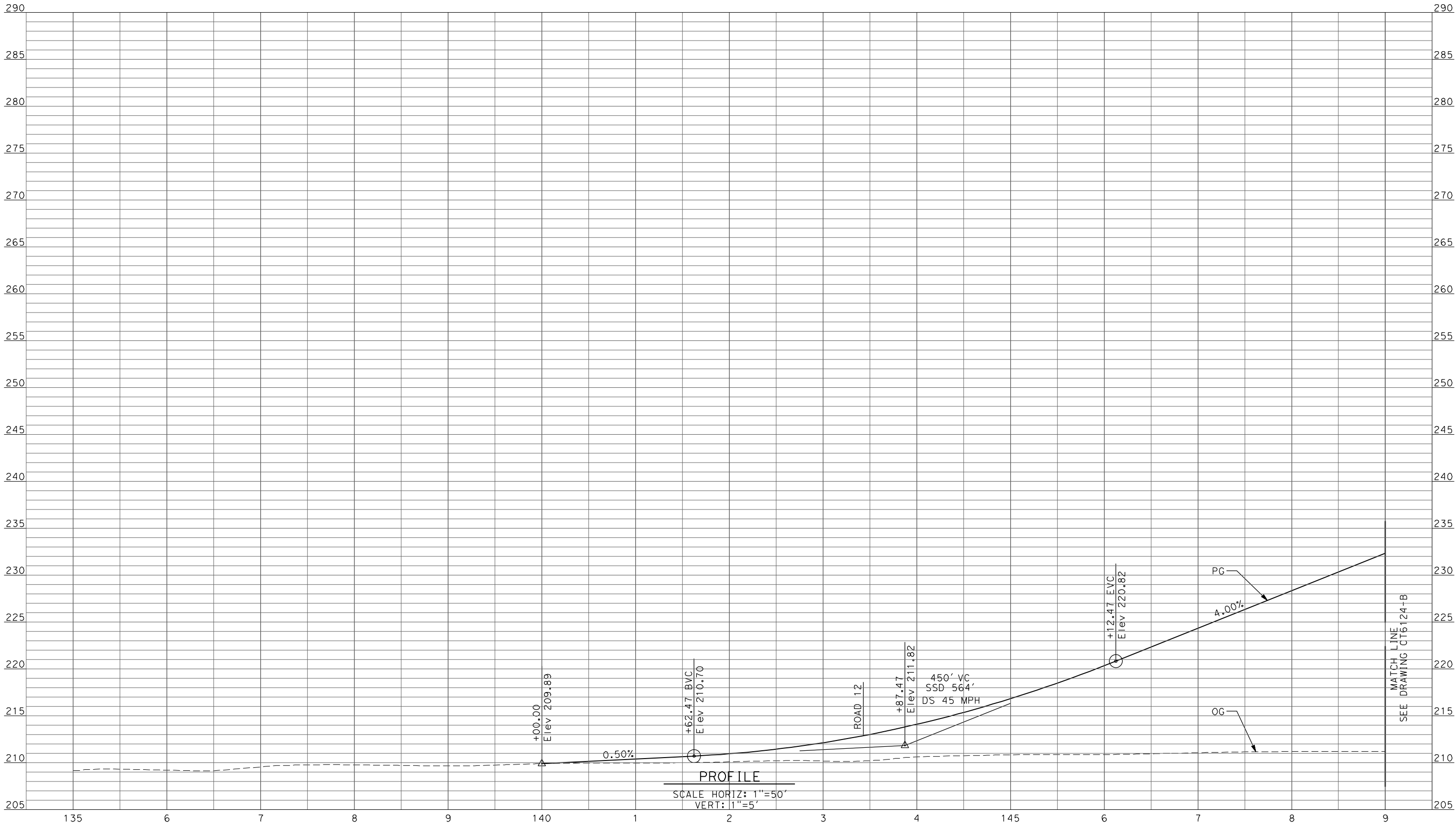
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GRADE SEPARATION - AVENUE 25  
PROFILE  
SHEET 5 OF 5

CONTRACT NO. HSR06-007
DRAWING NO. CT6122-B
SCALE AS SHOWN
SHEET NO. ### OF ###



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ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

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CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**

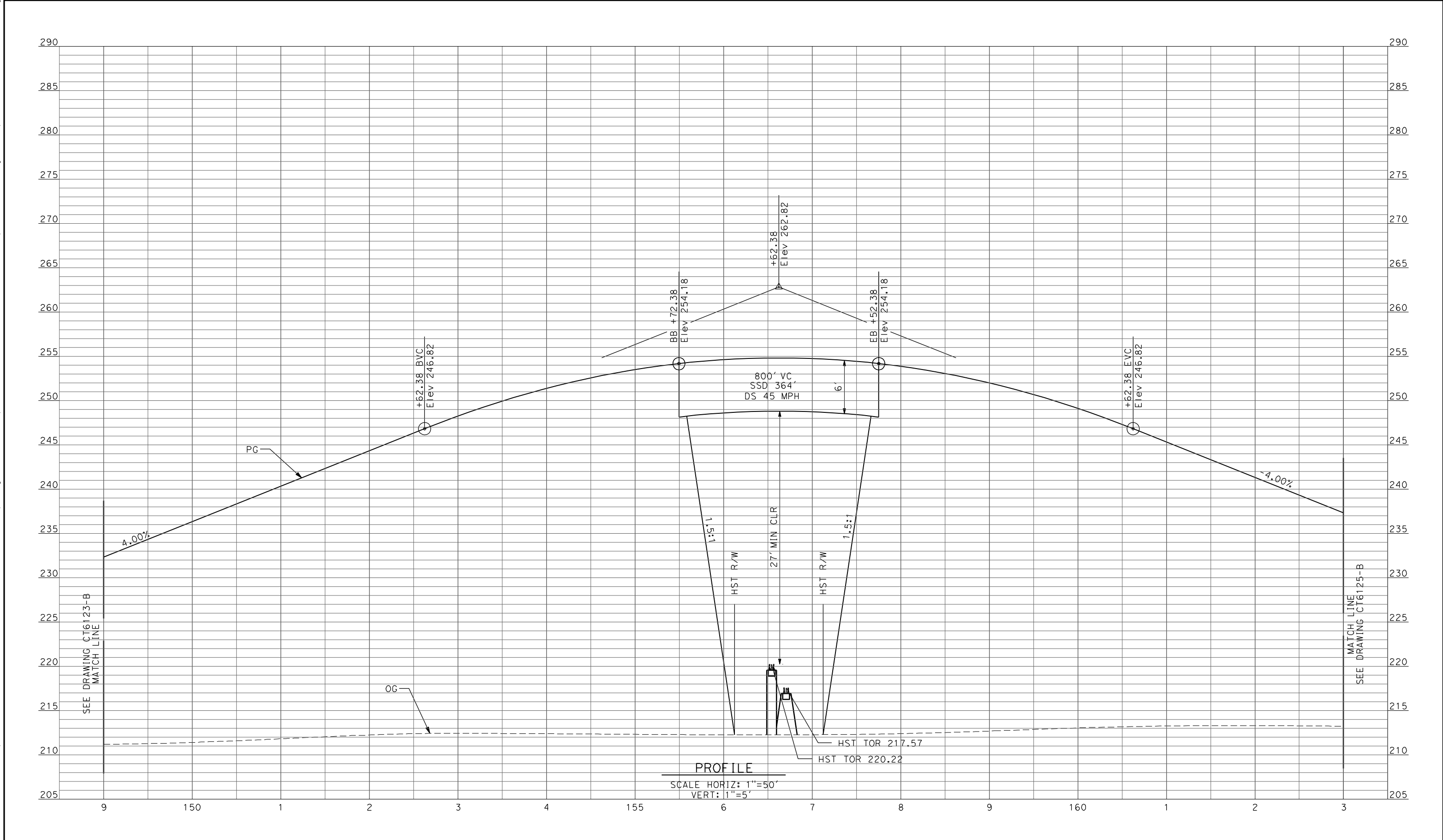
UPRR/SR99 WYE - (AVE 24)  
GRADE SEPARATION - AVENUE 26  
PROFILE  
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT6123-B
SCALE AS SHOWN
SHEET NO. ### OF ###



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ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

<b>RECORD SET</b> <b>15% DESIGN</b> <b>SUBMITTAL</b>
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**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

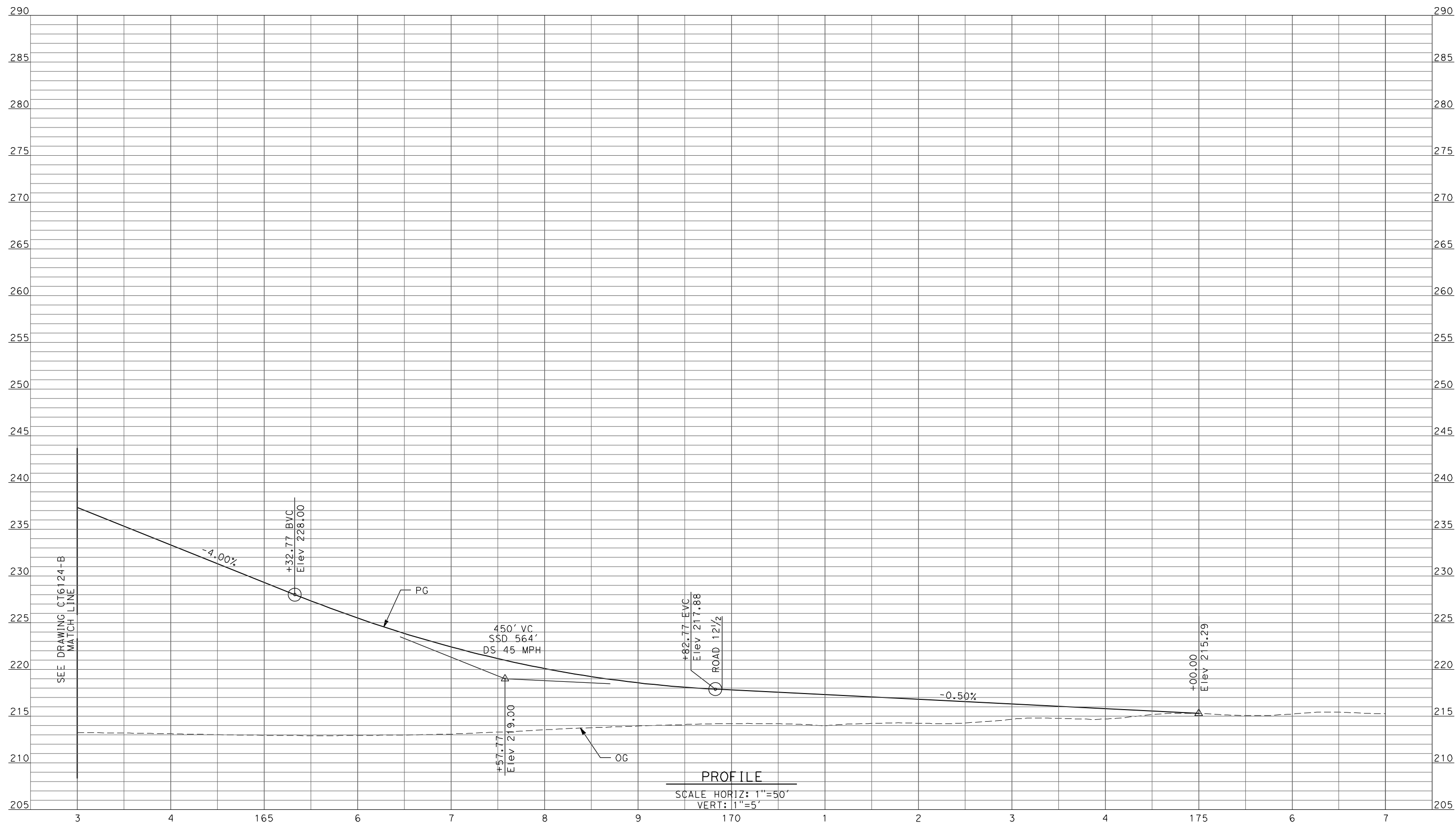
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**

UPRR/SR99 WYE - (AVE 24)  
GRADE SEPARATION - AVENUE 26

PROFILE  
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT6124-B
SCALE AS SHOWN
SHEET NO. ### OF ###





**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**

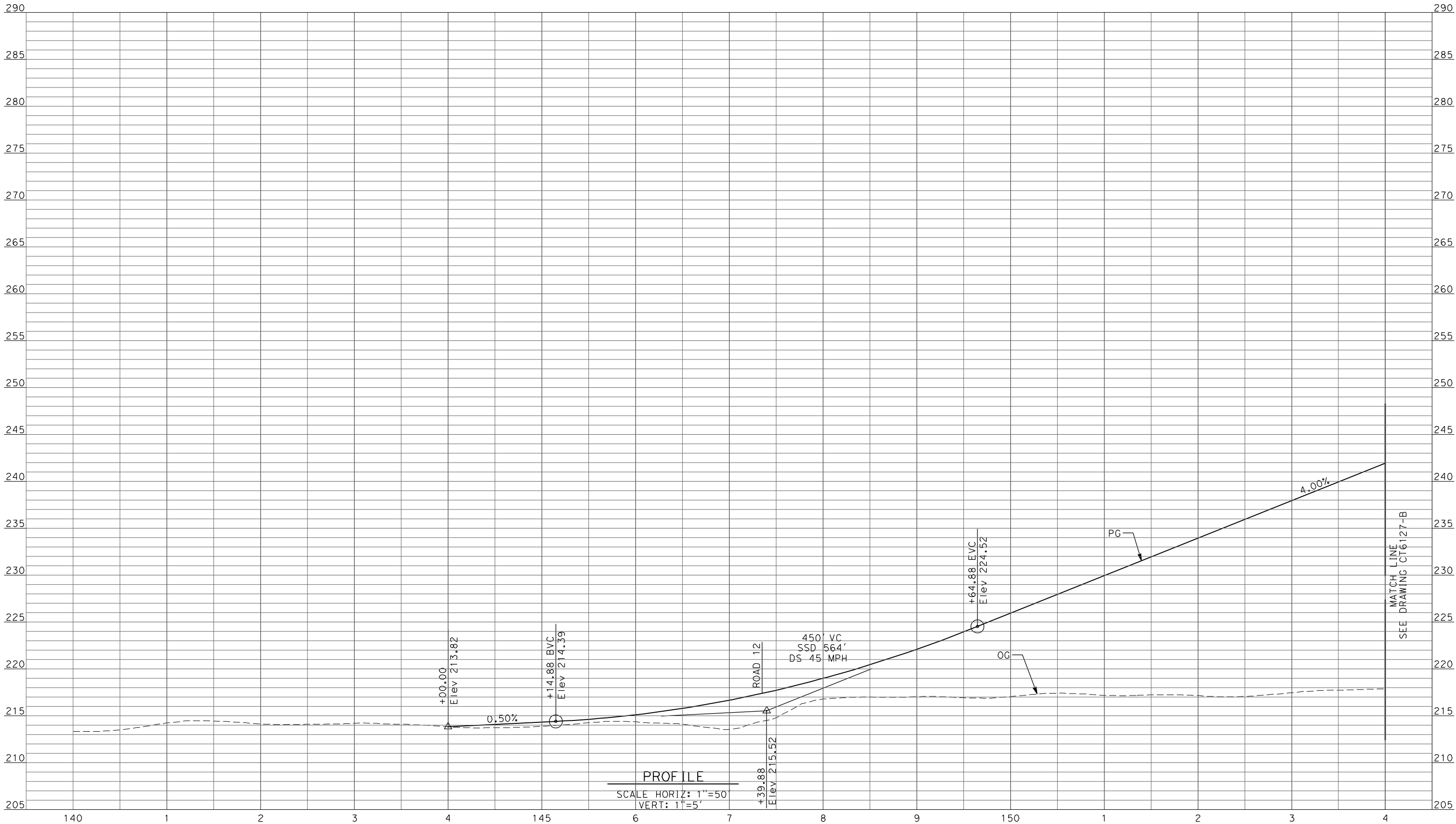


CONTRACT NO.	HSR06-007
DRAWING NO.	CT6125-B
SCALE	AS SHOWN
SHEET NO.	### OF ###



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ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

RECORD SET  
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CONSTRUCTION

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Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPRR/SR99 WYE - (AVE 24)  
GRADE SEPARATION - CROSS ROAD  
PROFILE  
SHEET 1 OF 3

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT6126-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###





**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

UPRR/SR99 WYE - (AVE 24)  
GRADE SEPARATION - CROSS ROAD  
PROFILE  
SHEET 2 OF 3

CONTRACT NO.	HSR06-007
DRAWING NO.	CT6127-B
SCALE	AS SHOWN
SHEET NO.	### OF ###



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ReyesC1

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

<b>RECORD SET</b> <b>15% DESIGN</b> <b>SUBMITTAL</b>
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Sacramento, CA 95811



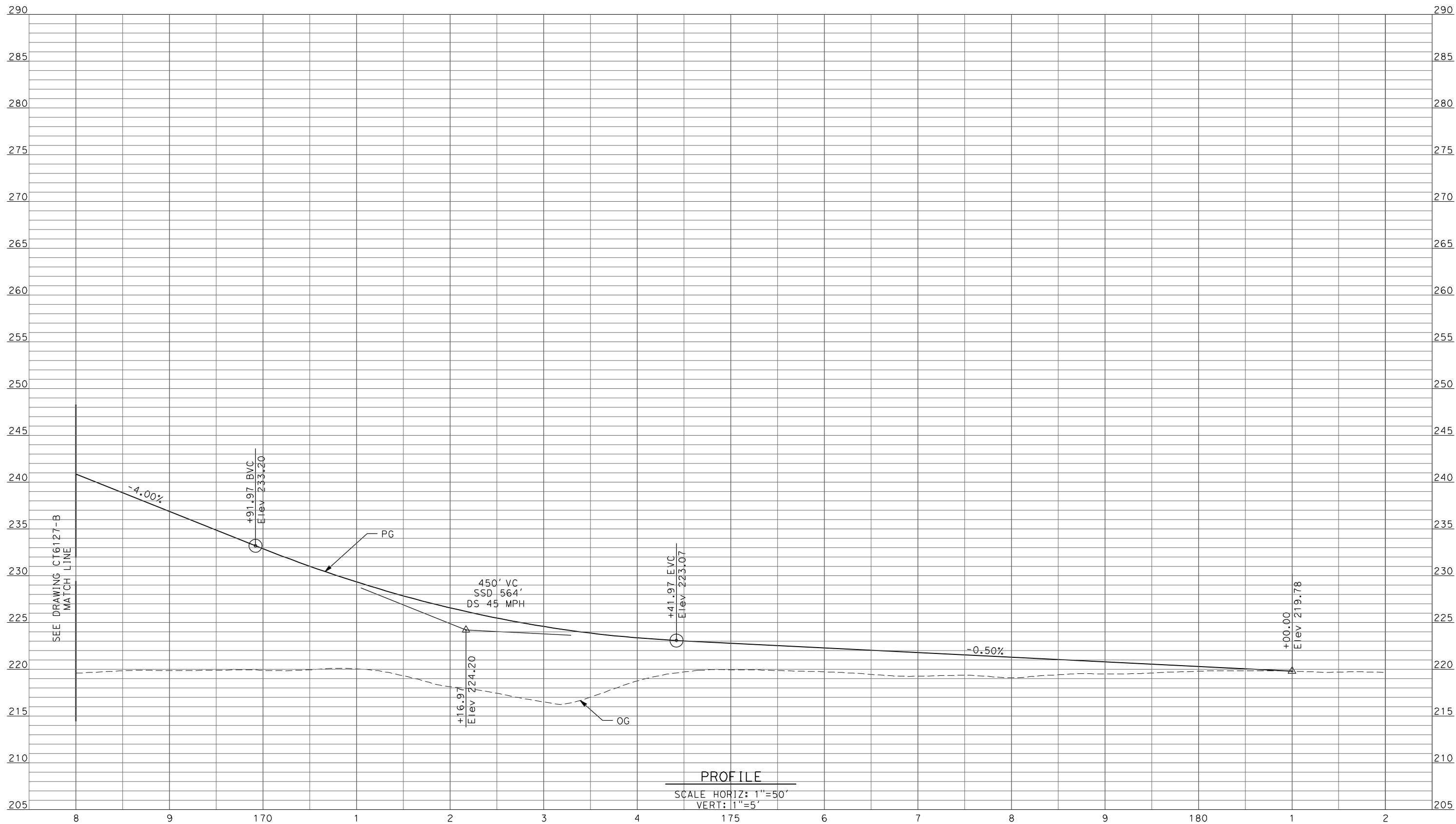


**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**

UPRR/SR99 WYE - (AVE 24)  
GRADE SEPARATION - CROSS ROAD  
PROFILE  
SHEET 3 OF 3

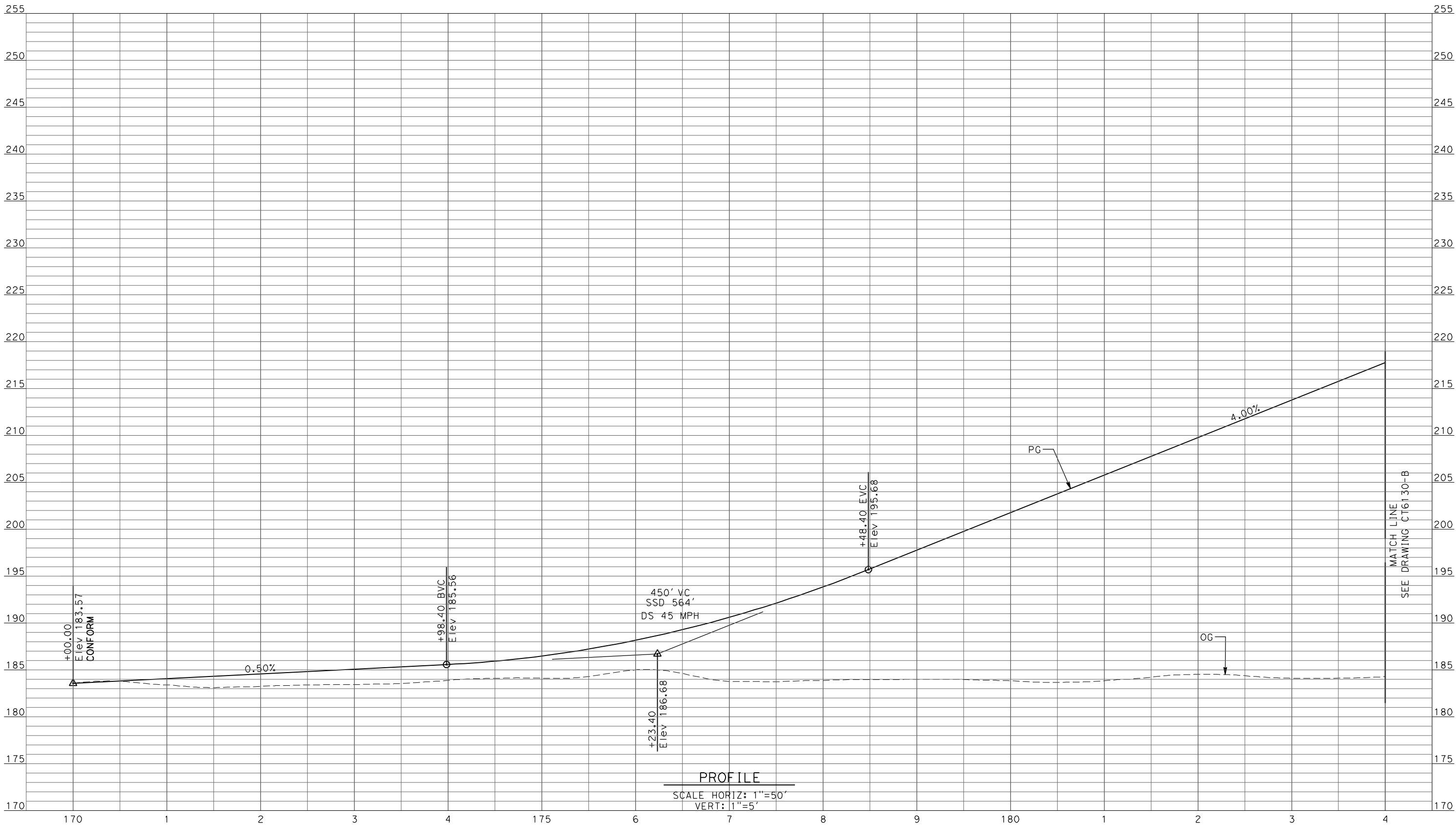
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SCALE AS SHOWN
SHEET NO. ### OF ###





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ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET**  
**15% DESIGN**  
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**CONSTRUCTION**

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**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**

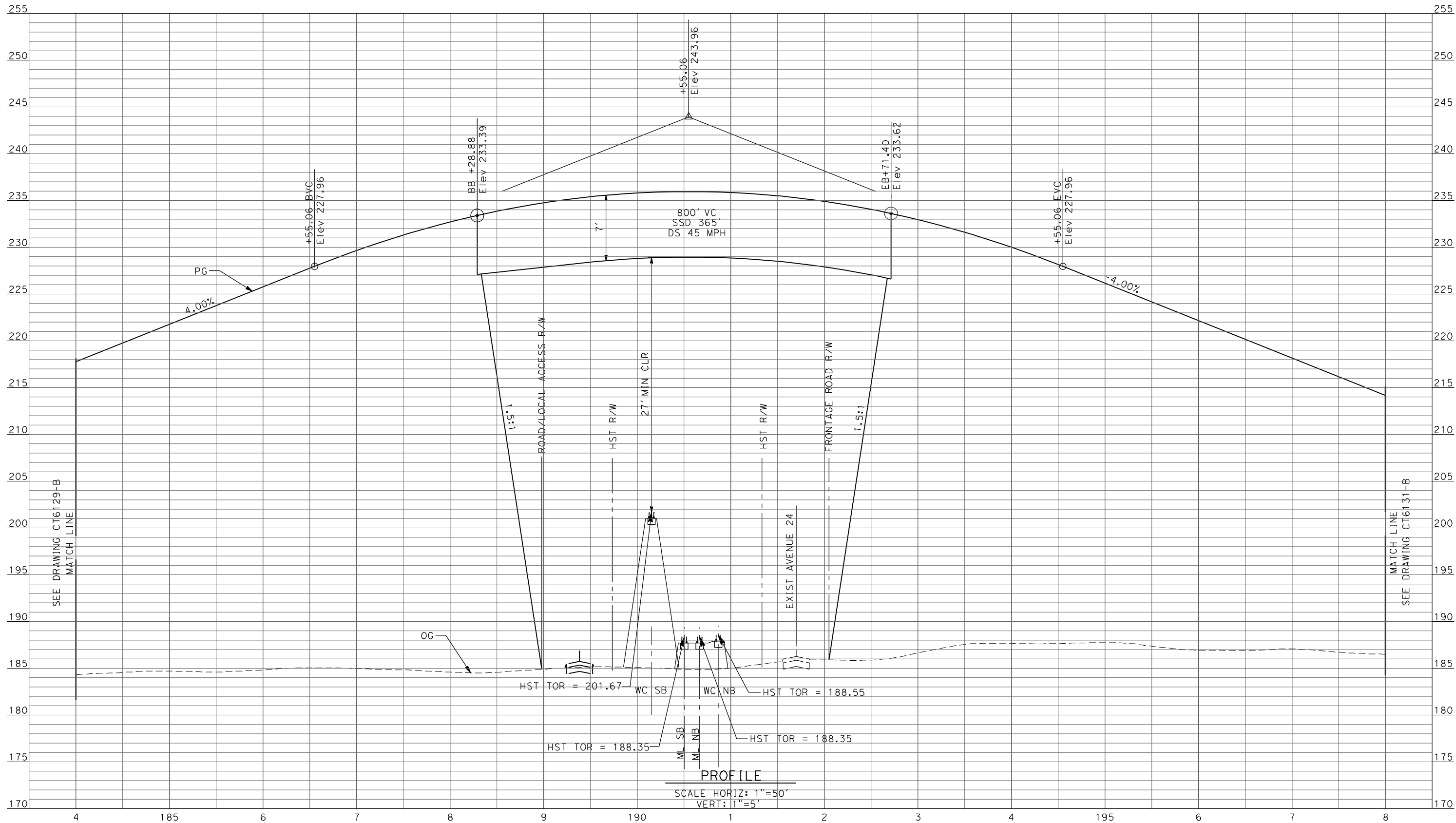
UPRR/SR99 MAINLINE/WYE - (WC)  
GRADE SEPARATION - ROAD 10 ALT 1  
PROFILE  
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT6129-B
SCALE AS SHOWN
SHEET NO. ### OF ###



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ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

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**CONSTRUCTION**

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Sacramento, CA 95811

**CH2M HILL**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**

UPRR/SR99 MAINLINE/WYE - (WC)  
GRADE SEPARATION - ROAD 10 ALT 1  
PROFILE  
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT6130-B
SCALE AS SHOWN
SHEET NO. ### OF ###







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ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION
1	12/28/11	RG			

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 06/30/2011

RECORD SET  
15% DESIGN  
SUBMITTAL

NOT FOR  
CONSTRUCTION



CALIFORNIA  
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO

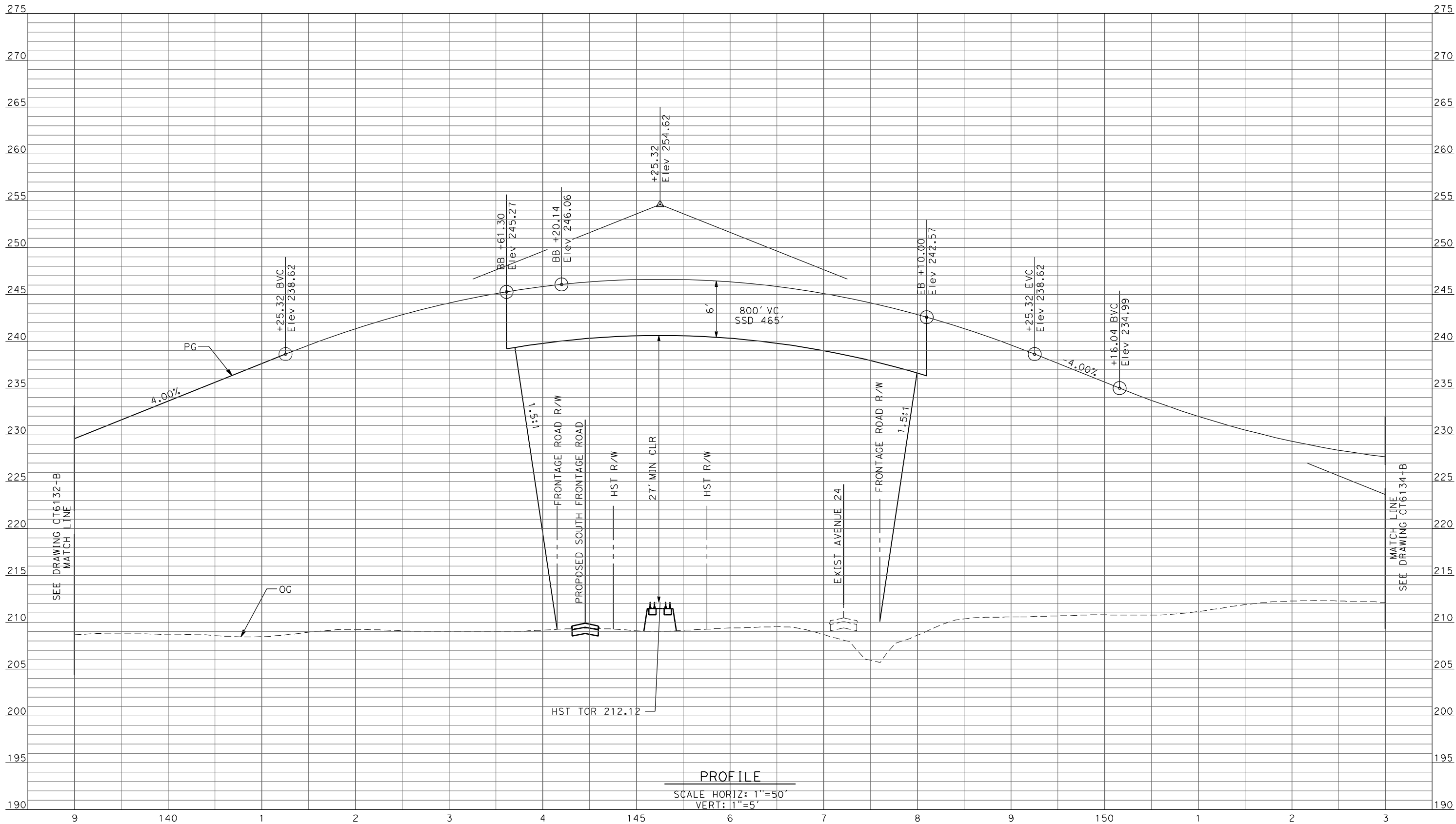
UPRR/SR99 MAINLINE/MERCED DO - (WC)  
GRADE SEPARATION - ROAD 13  
PROFILE  
SHEET 1 OF 5

CONTRACT NO. HSR06-007
DRAWING NO. CT6132-B
SCALE AS SHOWN
SHEET NO. ### OF ###



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ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION
1	12/28/11	RG			

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 06/30/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

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**CONSTRUCTION**

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Sacramento, CA 95811

**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**

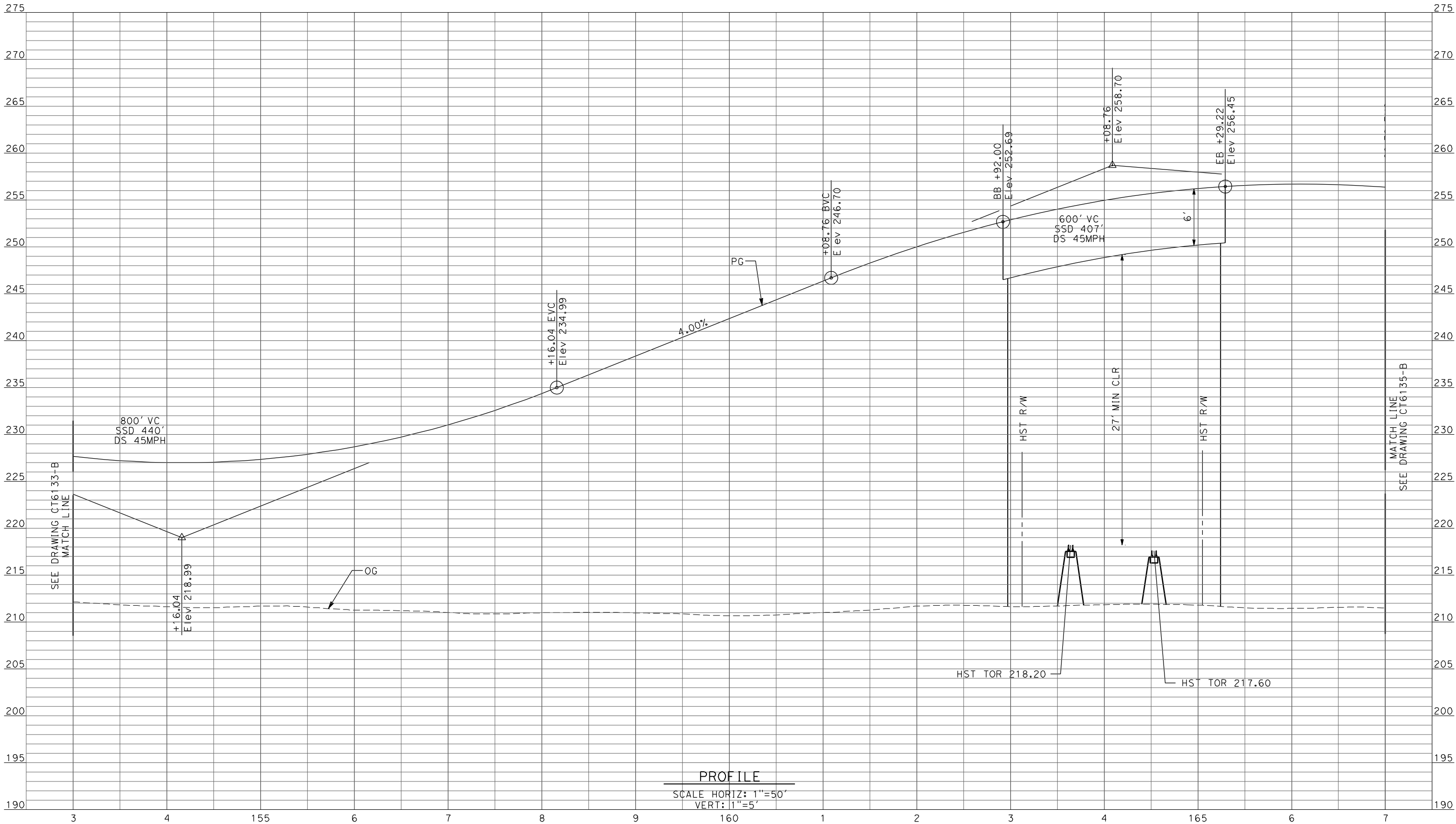
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GRADE SEPARATION - ROAD 13  
PROFILE  
SHEET 2 OF 5

CONTRACT NO. HSR06-007
DRAWING NO. CT6133-B
SCALE AS SHOWN
SHEET NO. ### OF ###



1/5/2012 1:34:25 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\Profile\CT6134-B.dgn

ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION
1	12/28/11	RG			

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 06/30/2011

RECORD SET  
15% DESIGN  
SUBMITTAL

NOT FOR  
CONSTRUCTION



CALIFORNIA  
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO

UPRR/SR99 MAINLINE/MERCED DO - (WC)  
GRADE SEPARATION - ROAD 13  
PROFILE  
SHEET 3 OF 5

CONTRACT NO. HSR06-007
DRAWING NO. CT6134-B
SCALE AS SHOWN
SHEET NO. ### OF ###



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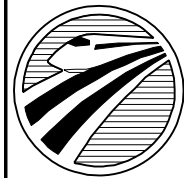
ReyesC1

REV	DATE	BY	CHK	APP	DESCRIPTION
1	12/28/11	RG			

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 06/30/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

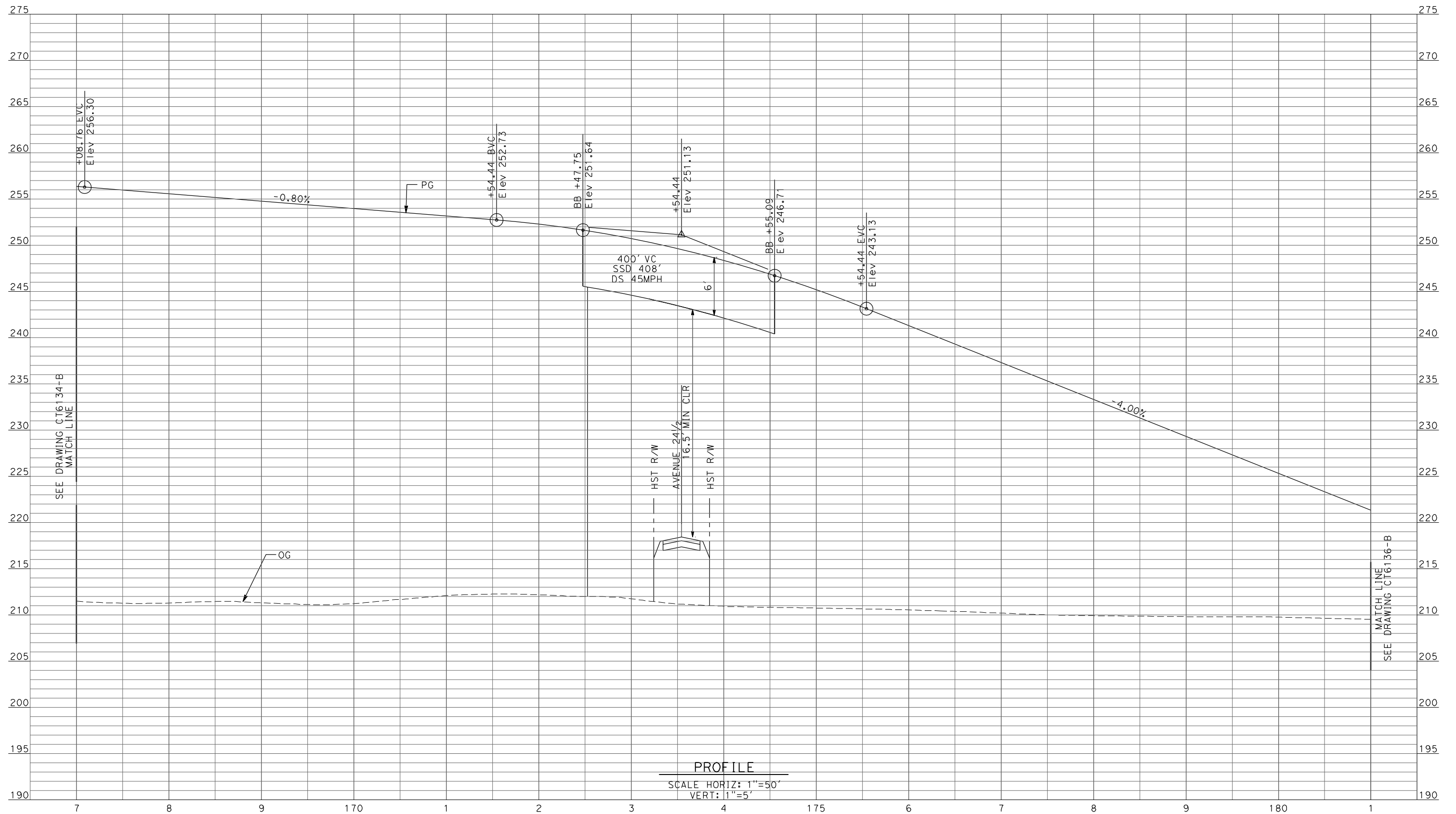
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE/MERCED DO - (WC)  
GRADE SEPARATION - ROAD 13  
PROFILE  
SHEET 4 OF 5

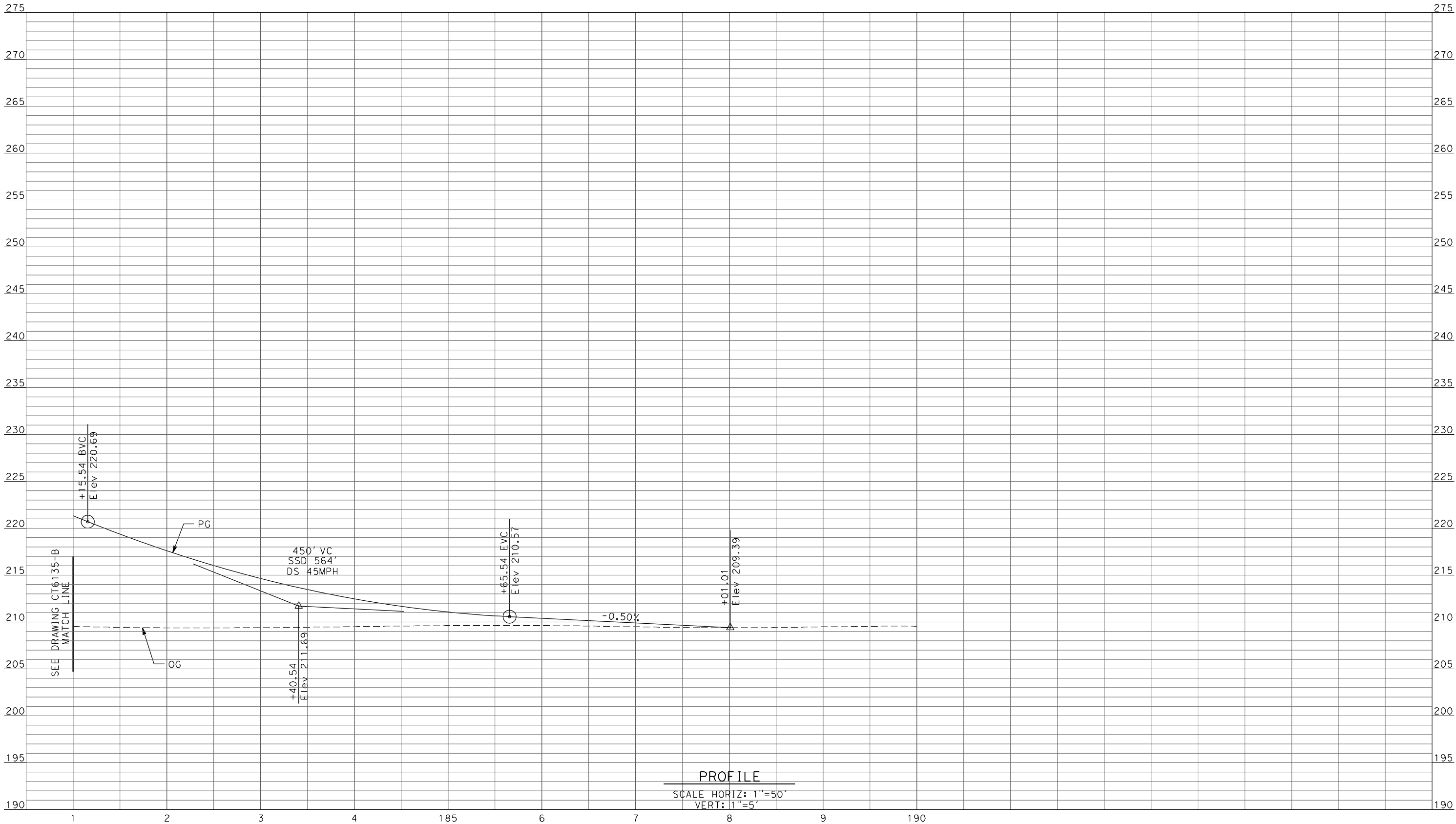
CONTRACT NO. HSR06-007
DRAWING NO. CT6135-B
SCALE AS SHOWN
SHEET NO. ### OF ###





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ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION
1	12/28/11	RG			

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 06/30/2011

RECORD SET  
15% DESIGN  
SUBMITTAL

NOT FOR  
CONSTRUCTION



CALIFORNIA  
HIGH-SPEED RAIL AUTHORITY

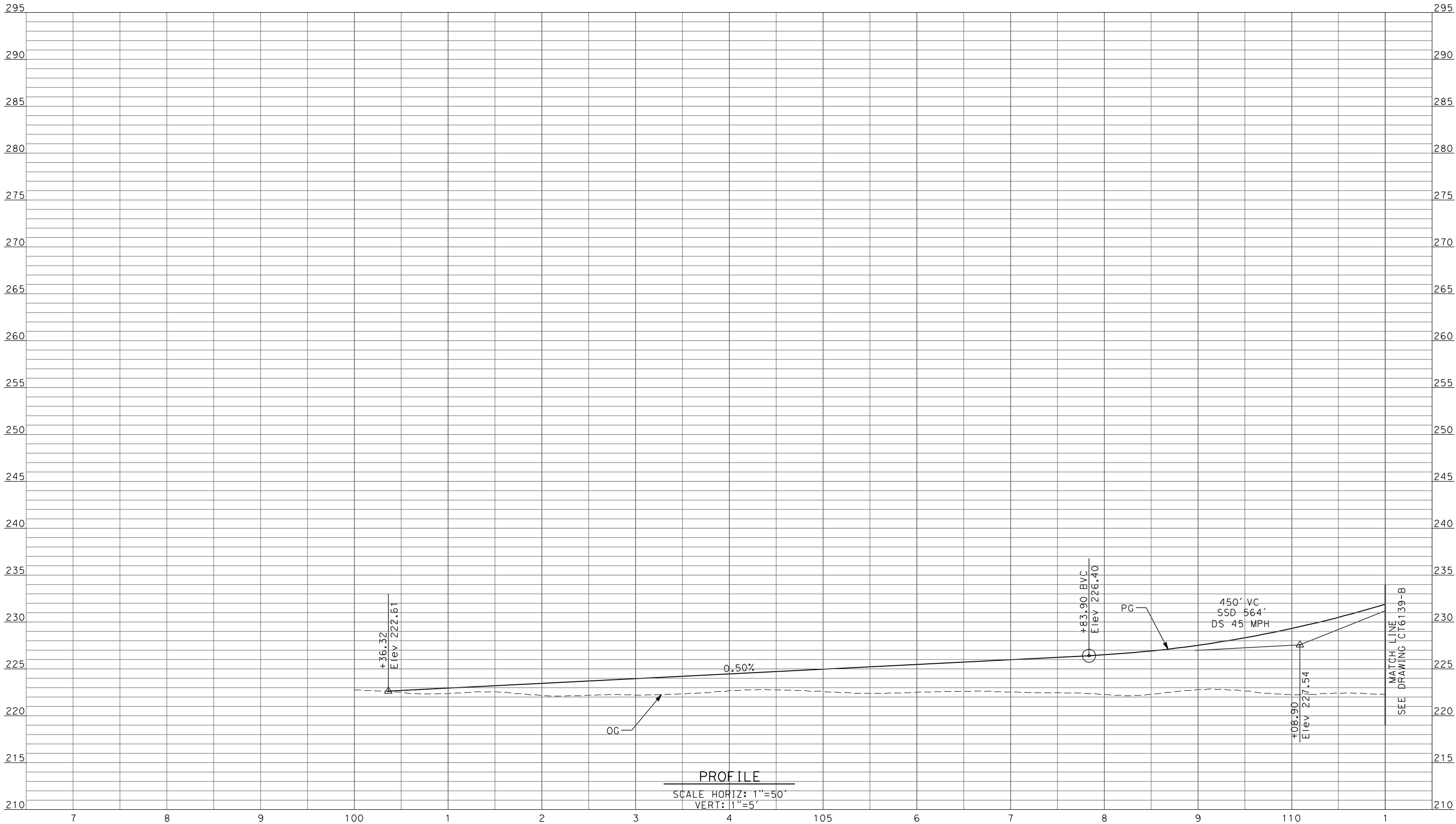
CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO  
UPRR/SR99 MAINLINE/MERCED DO - (WC)  
GRADE SEPARATION - ROAD 13  
PROFILE  
SHEET 5 OF 5

CONTRACT NO. HSR06-007
DRAWING NO. CT6136-B
SCALE AS SHOWN
SHEET NO. ### OF ###



4/27/2011 6:38:44 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6138-B.dgn

ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**

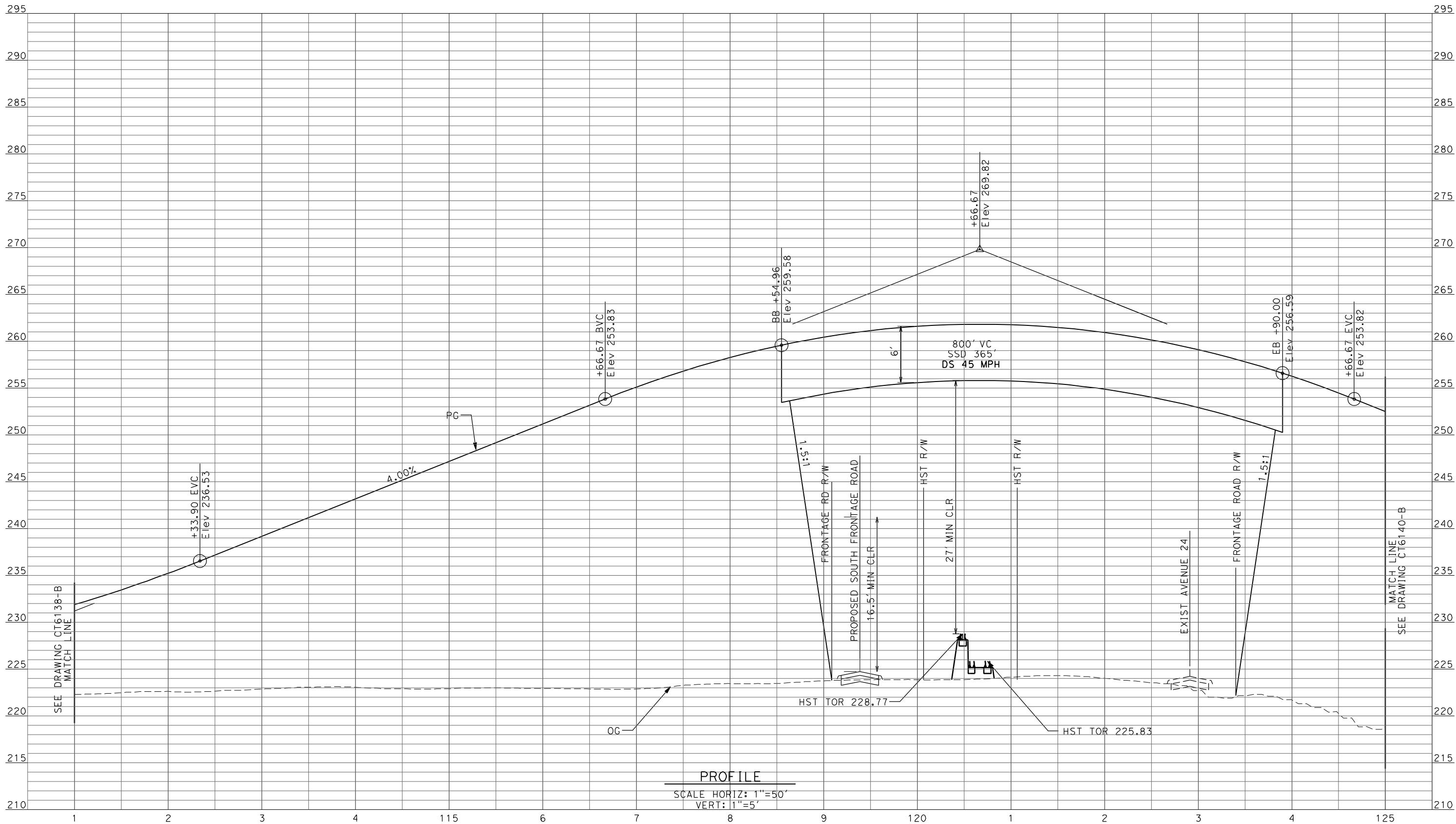
UPRR/SR99 MAINLINE DO/MERCED DO - (WC)  
GRADE SEPARATION - ROAD 15  
PROFILE  
SHEET 1 OF 4

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT6138-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 6:38:51 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6139-B.dgn

ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**

UPRR/SR99 MAINLINE DO/MERCED DO - (WC)  
GRADE SEPARATION - ROAD 15  
PROFILE  
SHEET 2 OF 4

CONTRACT NO.  
HSR06-007

DRAWING NO.  
CT6139-B

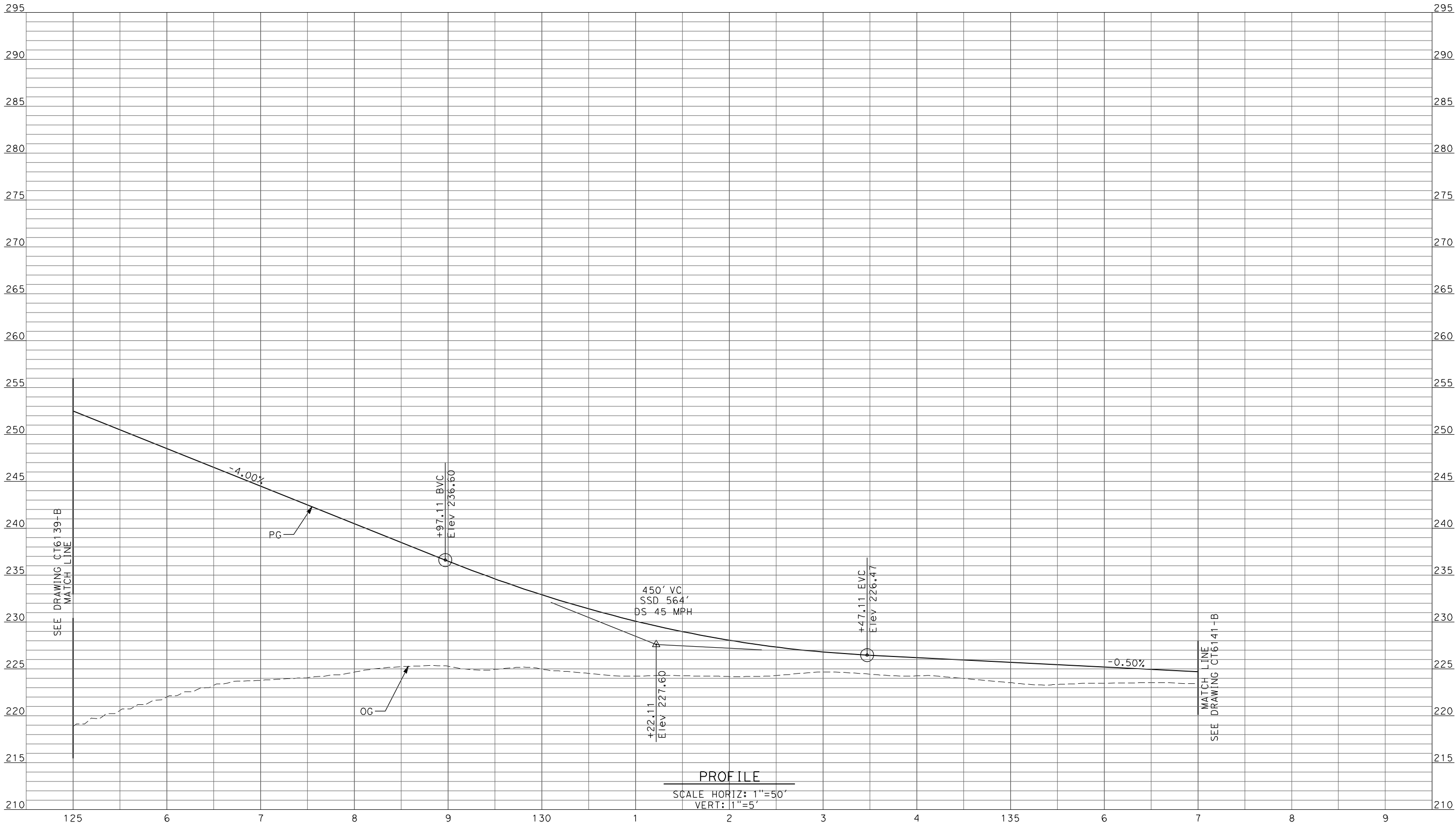
SCALE  
AS SHOWN

SHEET NO.  
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4/27/2011 6:38:58 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6140-B.dgn

ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

RECORD SET  
15% DESIGN  
SUBMITTAL

NOT FOR  
CONSTRUCTION

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPRR/SR99 MAINLINE DO/MERCED DO - (WC)  
GRADE SEPARATION - ROAD 15  
PROFILE  
SHEET 3 OF 4

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT6140-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 6:39:05 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6141-B.dgn



PROFILE  
SCALE HORIZ: 1"=50'  
VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

RECORD SET  
15% DESIGN  
SUBMITTAL

NOT FOR  
CONSTRUCTION

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

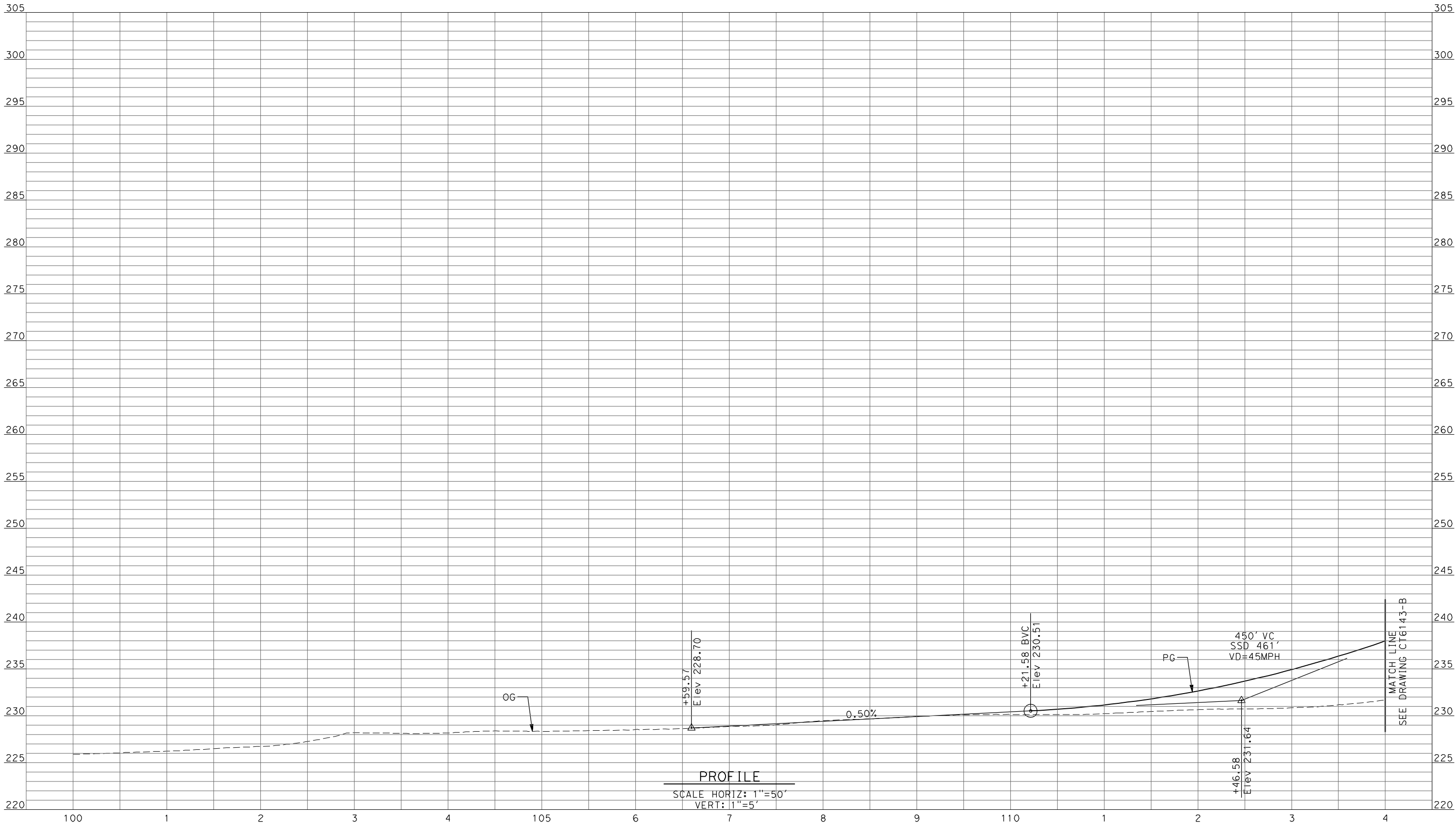
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPRR/SR99 MAINLINE DO/MERCED DO - (WC)  
GRADE SEPARATION - ROAD 15  
PROFILE  
SHEET 4 OF 4

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT6141-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 6:39:10 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6142-B.dgn

ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

RECORD SET  
15% DESIGN  
SUBMITTAL

NOT FOR  
CONSTRUCTION

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**

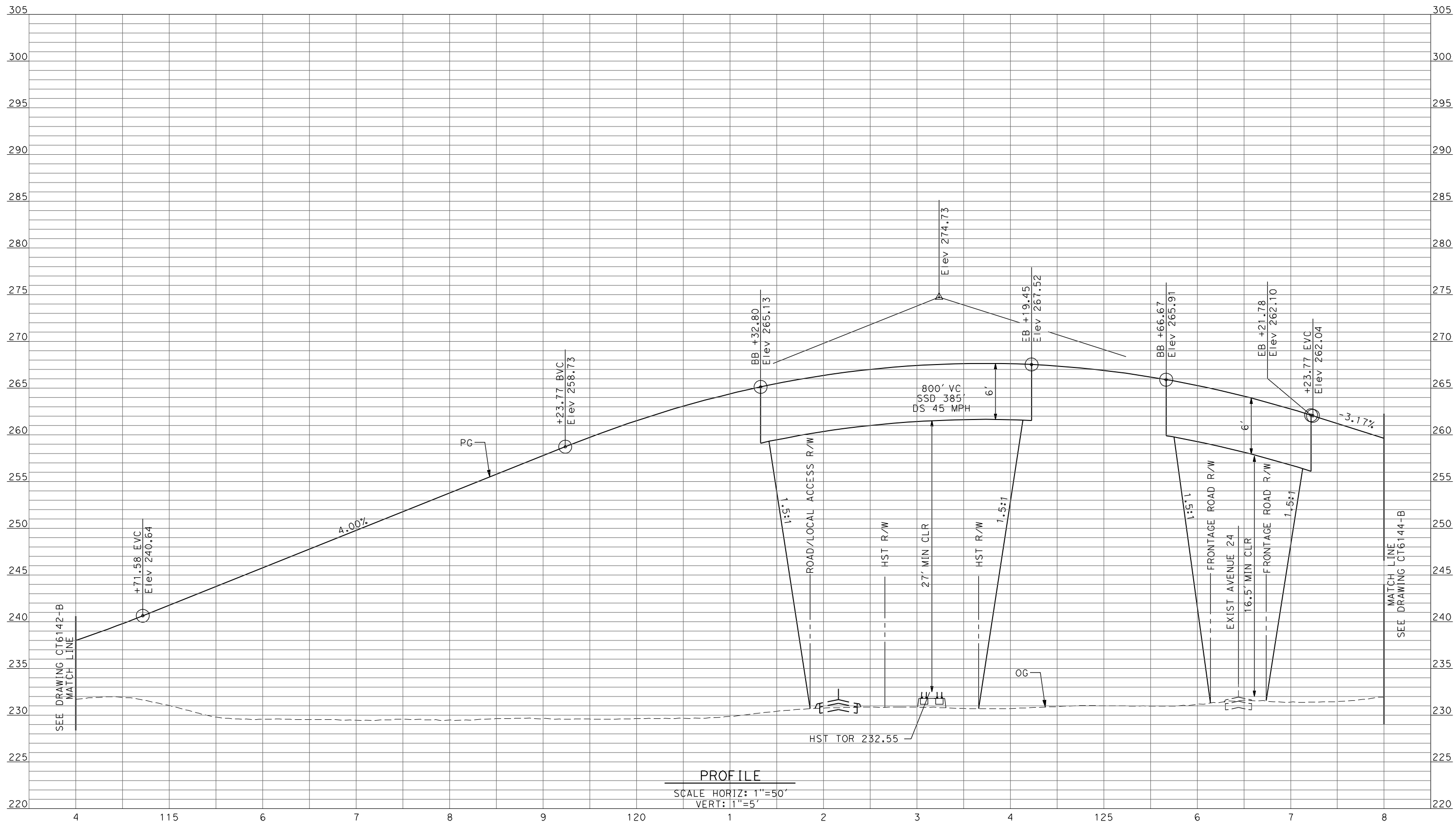


**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPRR/SR99 MAINLINE DO - (WC)  
GRADE SEPARATION - ROAD 16  
PROFILE  
SHEET 1 OF 4

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT6142-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###





REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY	D. AYELE
DRAWN BY	C. DELOS REYES
CHECKED BY	A. SILVER
IN CHARGE	A. BOONE
DATE	04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

## CALIFORNIA HIGH-SPEED TRAIN PROJECT MERCED TO FRESNO

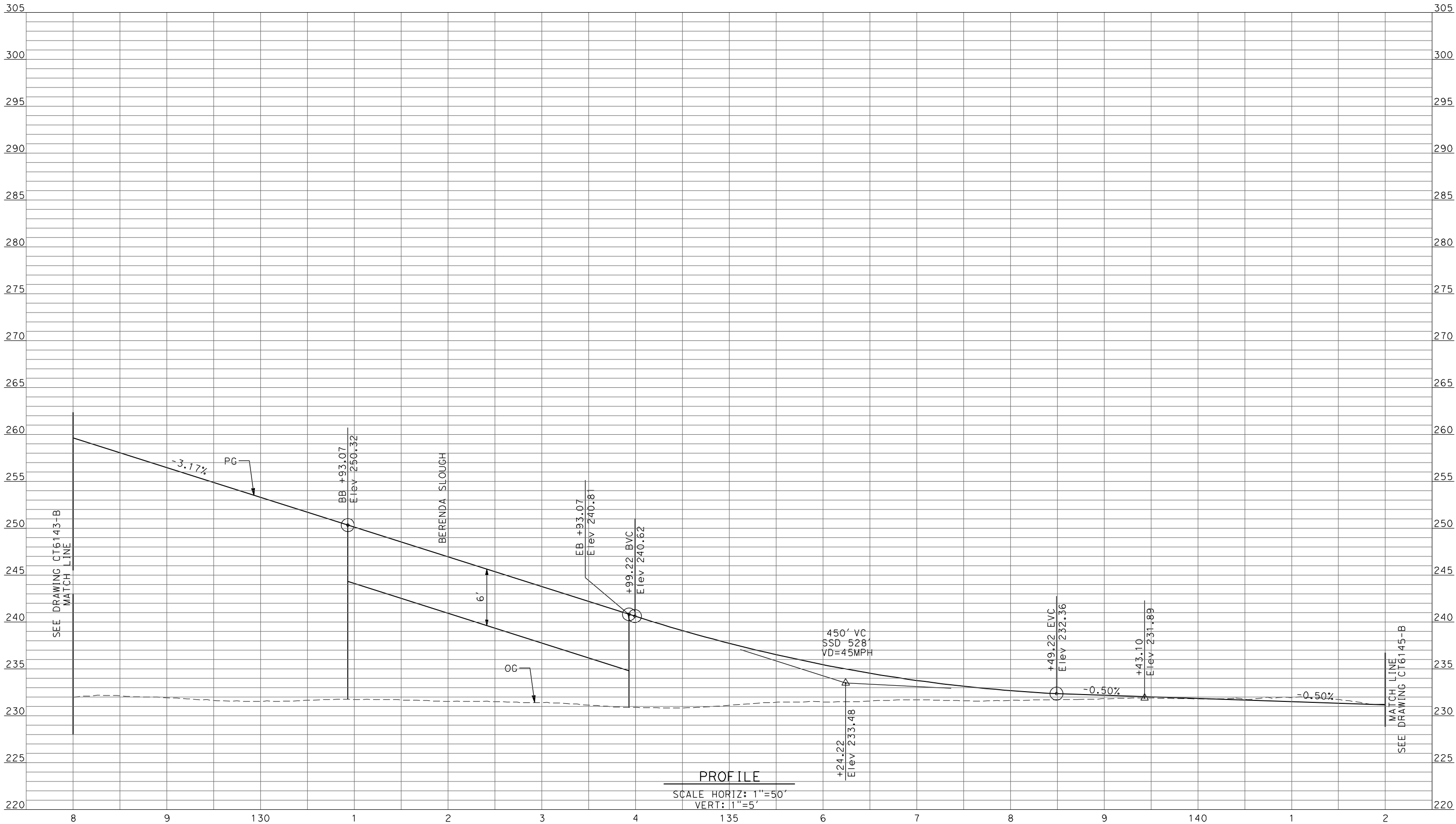
UPRR/SR99 MAINLINE DO - (WC)  
GRADE SEPARATION - ROAD 16  
PROFILE  
SHEET 2 OF 4

CONTRACT NO.	HSR06-007
DRAWING NO.	CT6143-B
SCALE	AS SHOWN
SHEET NO.	### OF ###



4/27/2011 6:39:20 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6144-B.dgn

ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

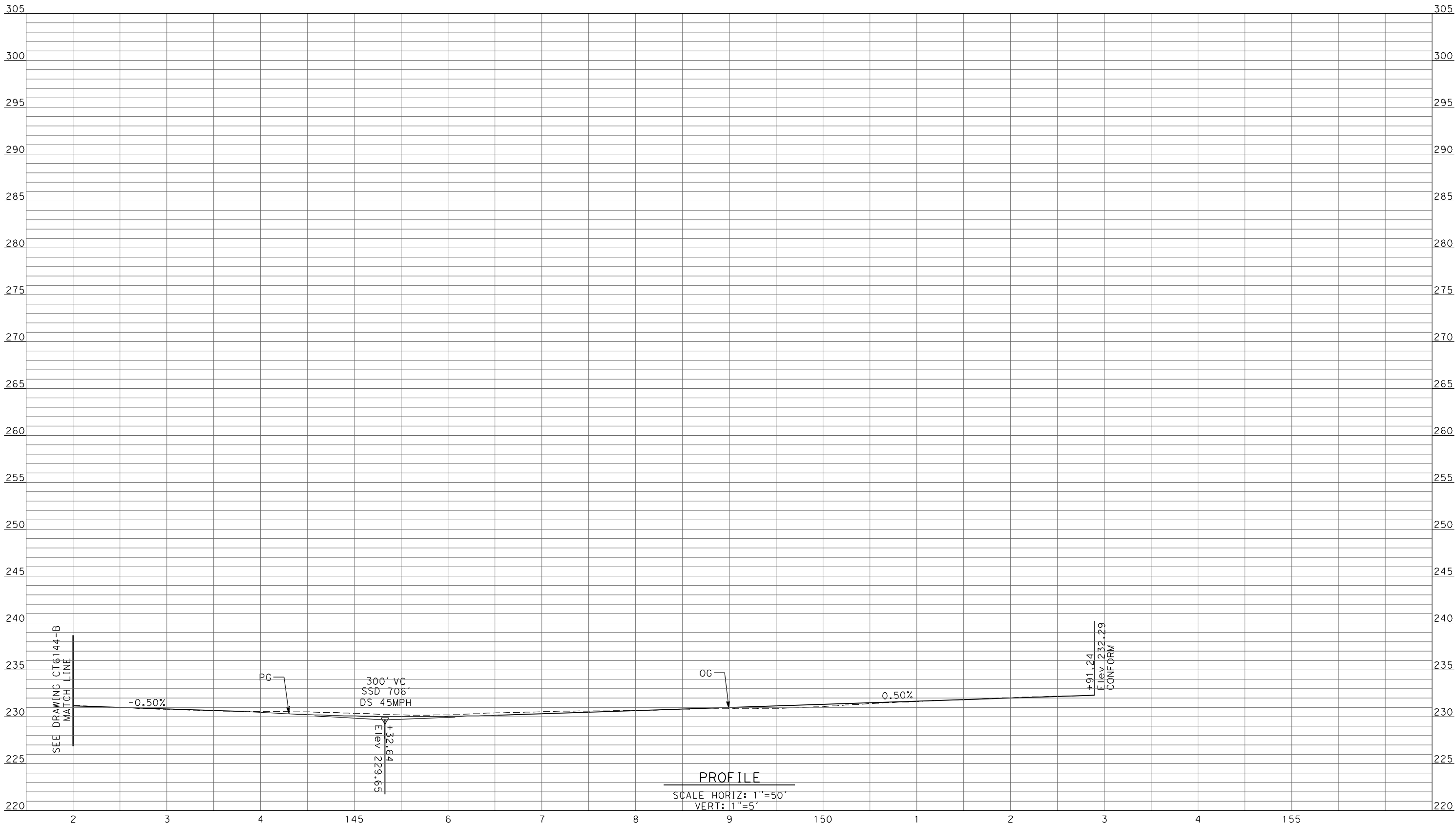
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE DO - (WC)  
GRADE SEPARATION - ROAD 16  
PROFILE  
SHEET 3 OF 4

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT6144-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 6:39:25 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6145-B.dgn

ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

RECORD SET  
15% DESIGN  
SUBMITTAL

NOT FOR  
CONSTRUCTION

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

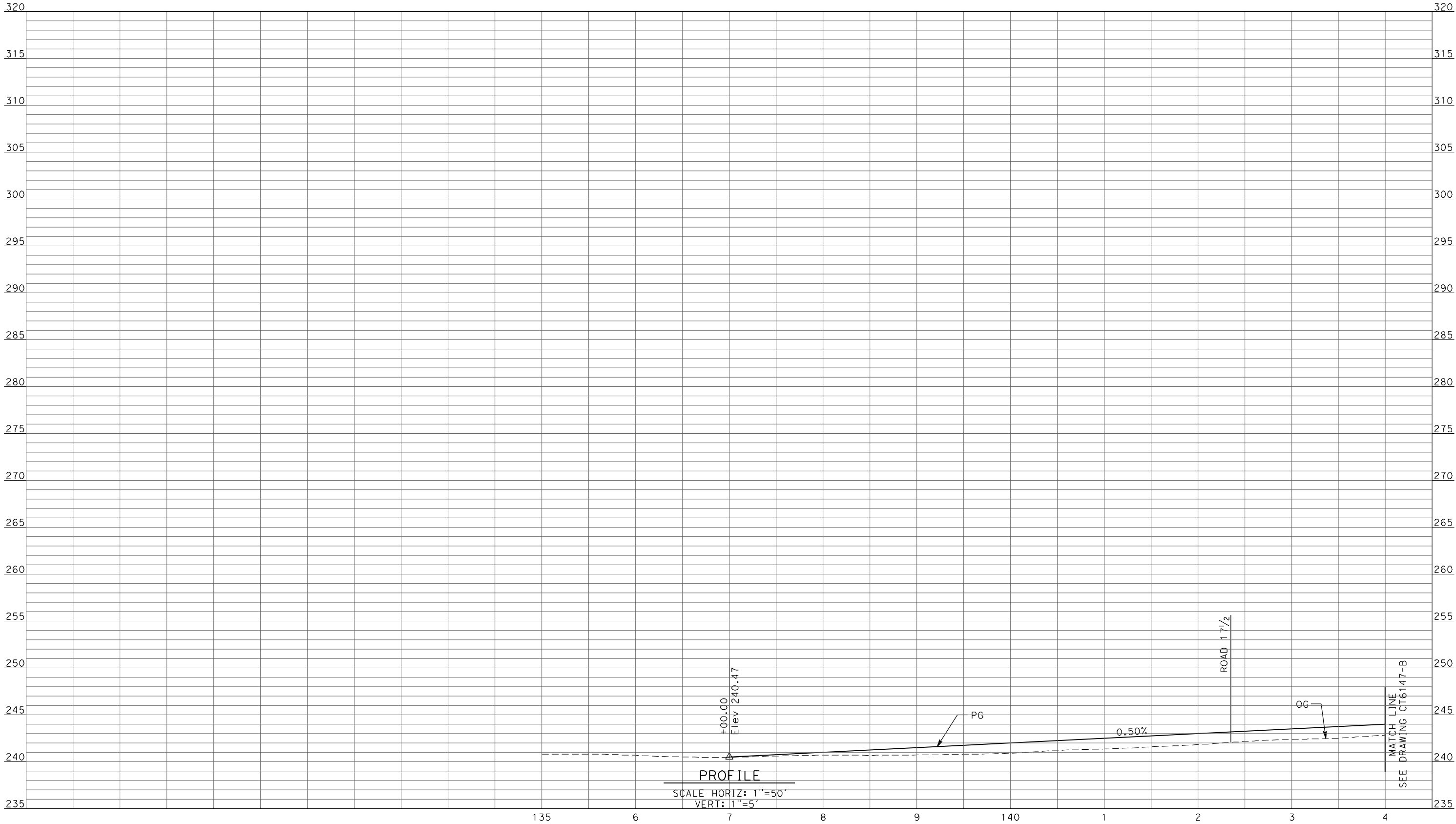
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPRR/SR99 MAINLINE DO - (WC)  
GRADE SEPARATION - ROAD 16  
PROFILE  
SHEET 4 OF 4

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT6145-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 6:39:30 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6146-B.dgn

ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**

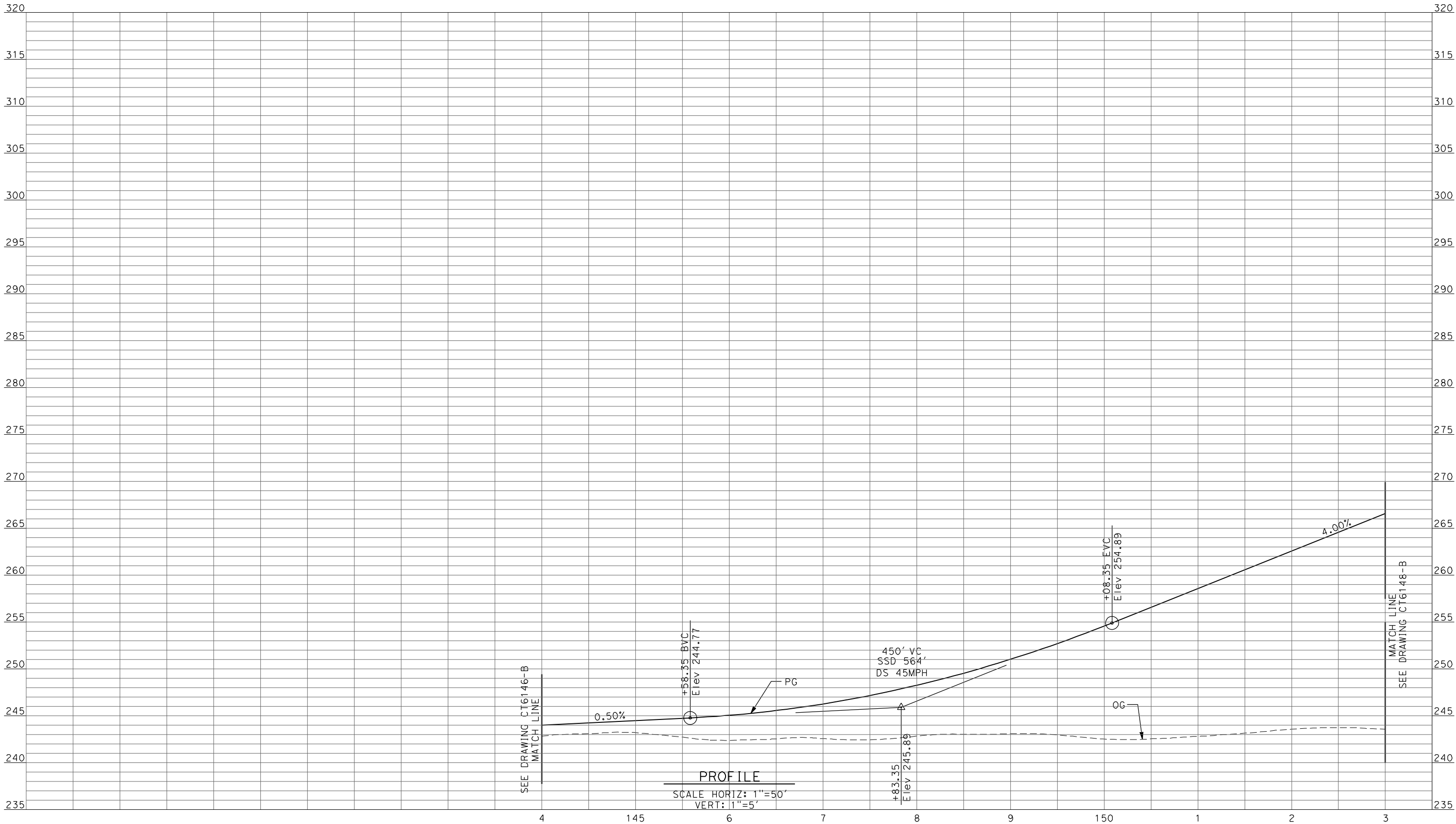
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GRADE SEPARATION - AVENUE 23 1/2  
PROFILE  
SHEET 1 OF 4

CONTRACT NO. HSR06-007
DRAWING NO. CT6146-B
SCALE AS SHOWN
SHEET NO. ### OF ###



4/27/2011 6:39:35 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6147-B.dgn

ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

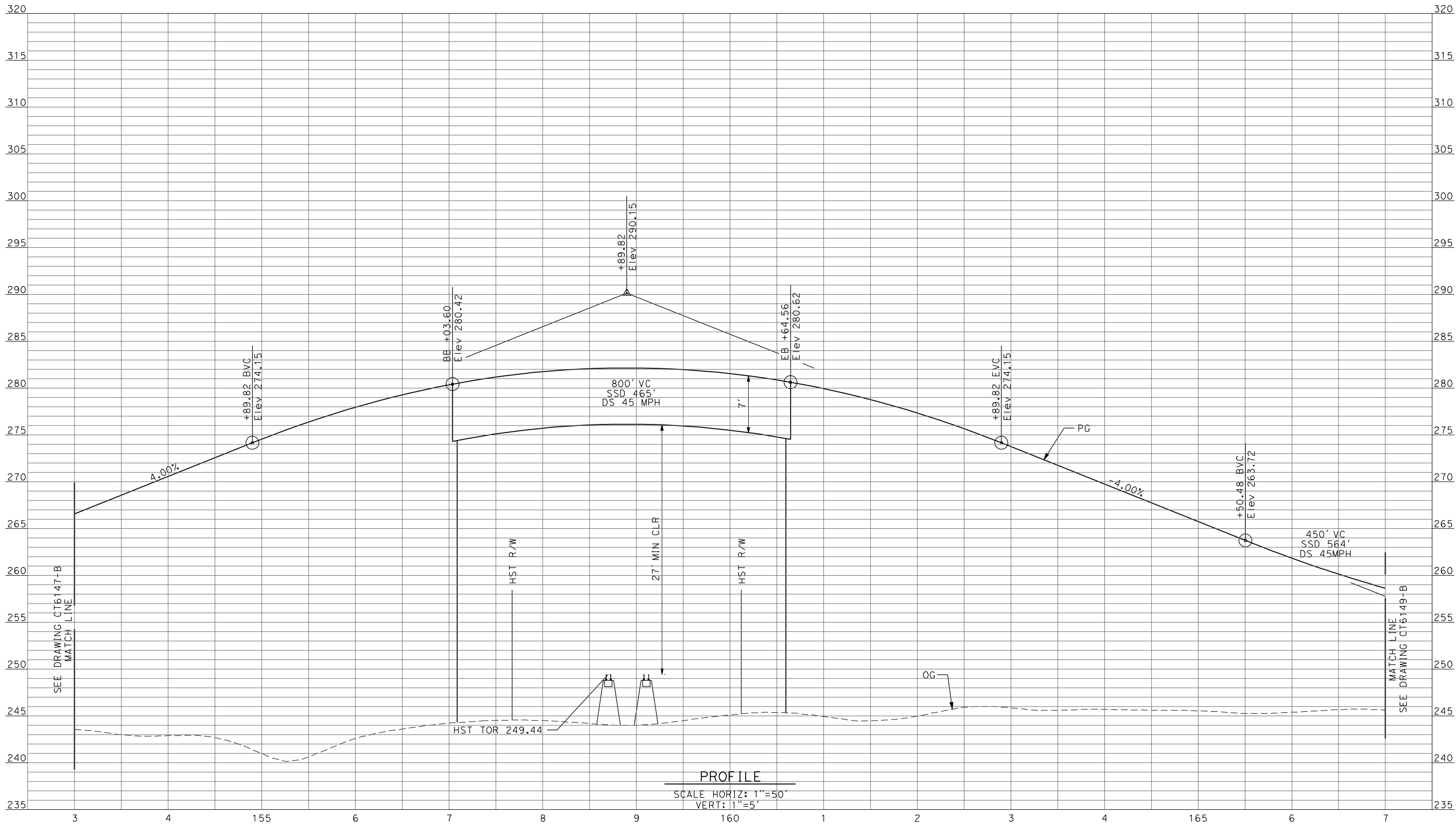
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE DO - (WC)  
GRADE SEPARATION - AVENUE 23 1/2  
PROFILE  
SHEET 2 OF 4

CONTRACT NO. HSR06-007
DRAWING NO. CT6147-B
SCALE AS SHOWN
SHEET NO. ### OF ###



4/27/2011 6:39:40 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6148-B.dgn

ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

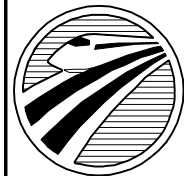
DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**

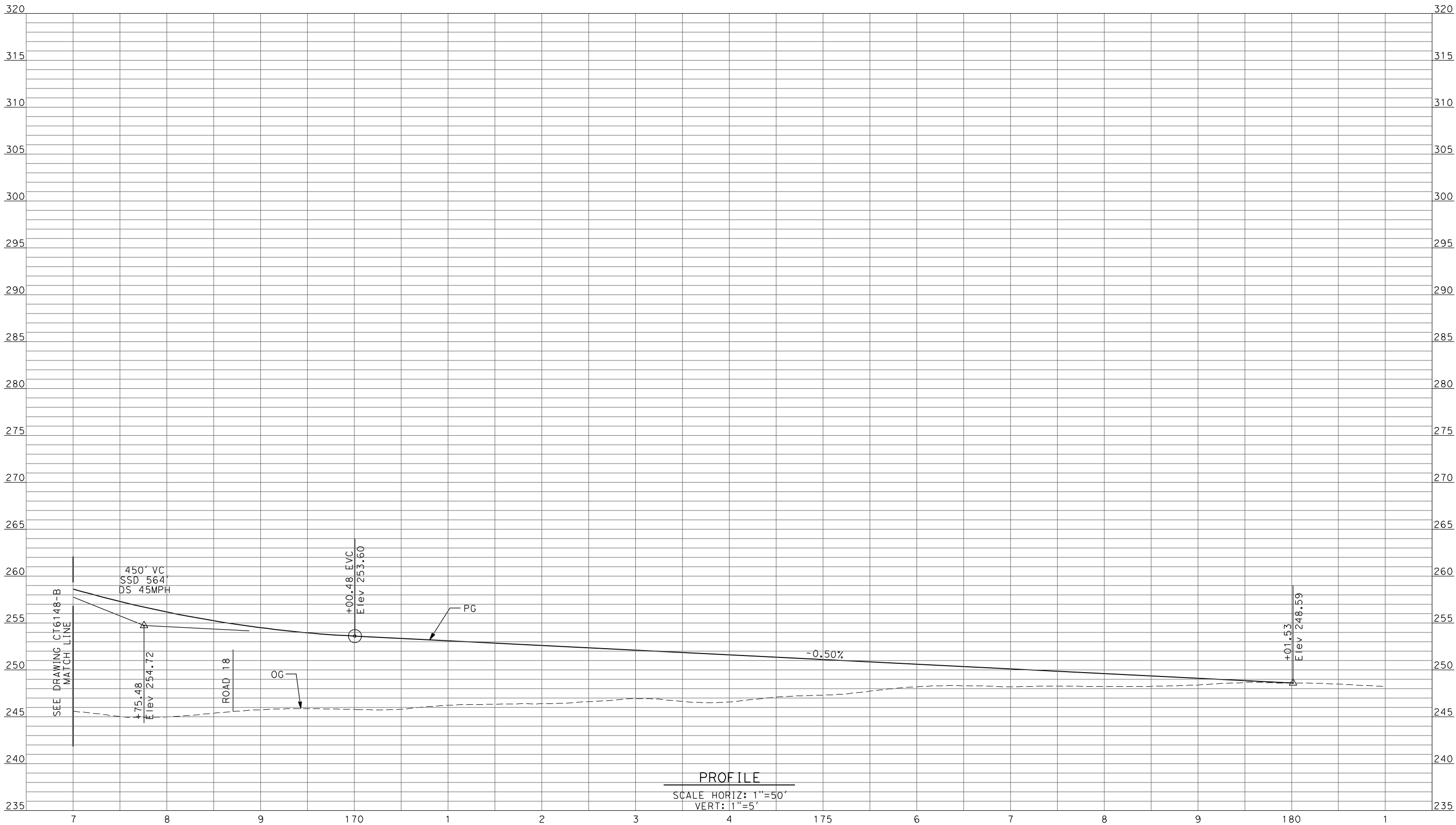
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GRADE SEPARATION - AVENUE 23 1/2  
PROFILE  
SHEET 3 OF 4

CONTRACT NO. HSR06-007
DRAWING NO. CT6148-B
SCALE AS SHOWN
SHEET NO. ### OF ###



4/27/2011 6:39:45 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\Profile\CT6149-B.dgn

ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

RECORD SET  
15% DESIGN  
SUBMITTAL

NOT FOR  
CONSTRUCTION



CALIFORNIA  
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO

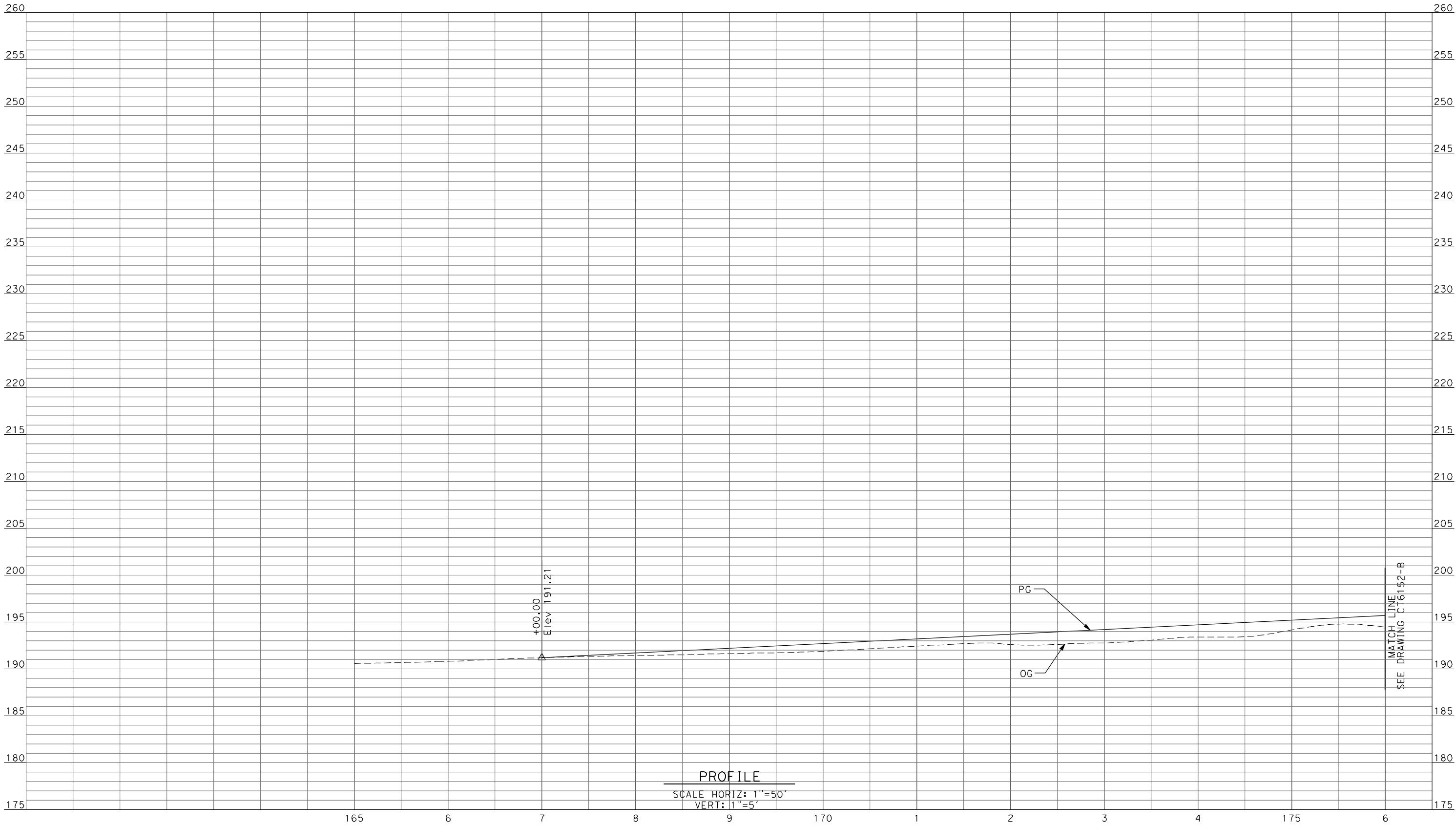
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GRADE SEPARATION - AVENUE 23 1/2  
PROFILE  
SHEET 4 OF 4

CONTRACT NO. HSR06-007
DRAWING NO. CT6149-B
SCALE AS SHOWN
SHEET NO. ### OF ###



1/5/2012 1:34:40 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6151-B.dgn

ReyesC1



1	12/28/11	RG			
REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 06/30/2011

RECORD SET  
15% DESIGN  
SUBMITTAL

NOT FOR  
CONSTRUCTION



CALIFORNIA  
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO

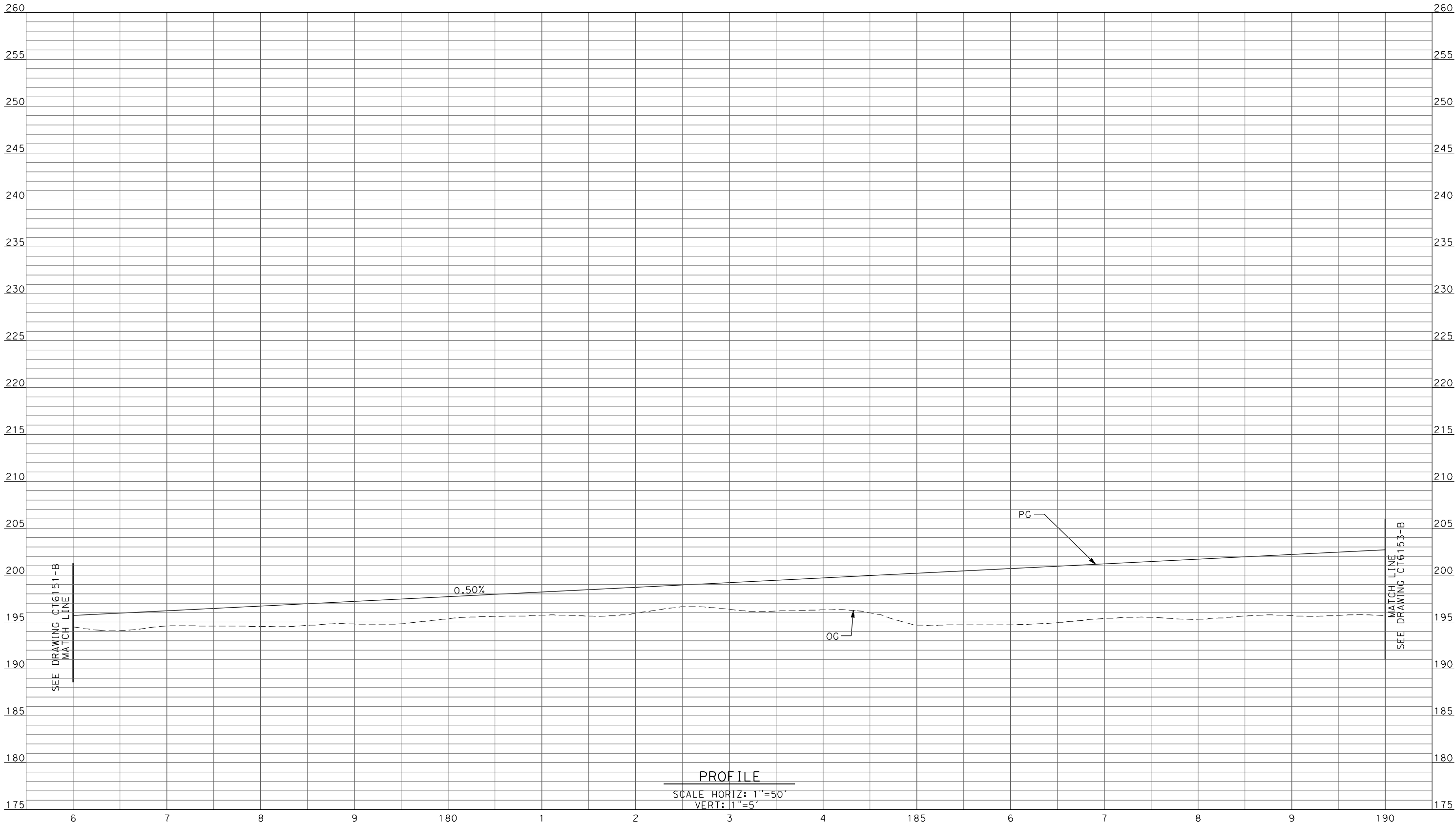
UPRR/SR99 WYE/MERCED DO - (WC)  
GRADE SEPARATION - AVENUE 25  
PROFILE  
SHEET 1 OF 13

CONTRACT NO. HSR06-007
DRAWING NO. CT6151-B
SCALE AS SHOWN
SHEET NO. ### OF ###



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ReyesC1



PROFILE  
SCALE HORIZ: 1"=50'  
VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION
1	12/28/11	RG			

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 06/30/2011

RECORD SET  
15% DESIGN  
SUBMITTAL

NOT FOR  
CONSTRUCTION



CALIFORNIA  
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO

UPRR/SR99 WYE/MERCED DO - (WC)  
GRADE SEPARATION - AVENUE 25  
PROFILE  
SHEET 2 OF 13

CONTRACT NO. HSR06-007
DRAWING NO. CT6152-B
SCALE AS SHOWN
SHEET NO. ### OF ###



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ReyesC1

REV	DATE	BY	CHK	APP	DESCRIPTION
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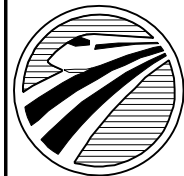
DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 06/30/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2MHILL**

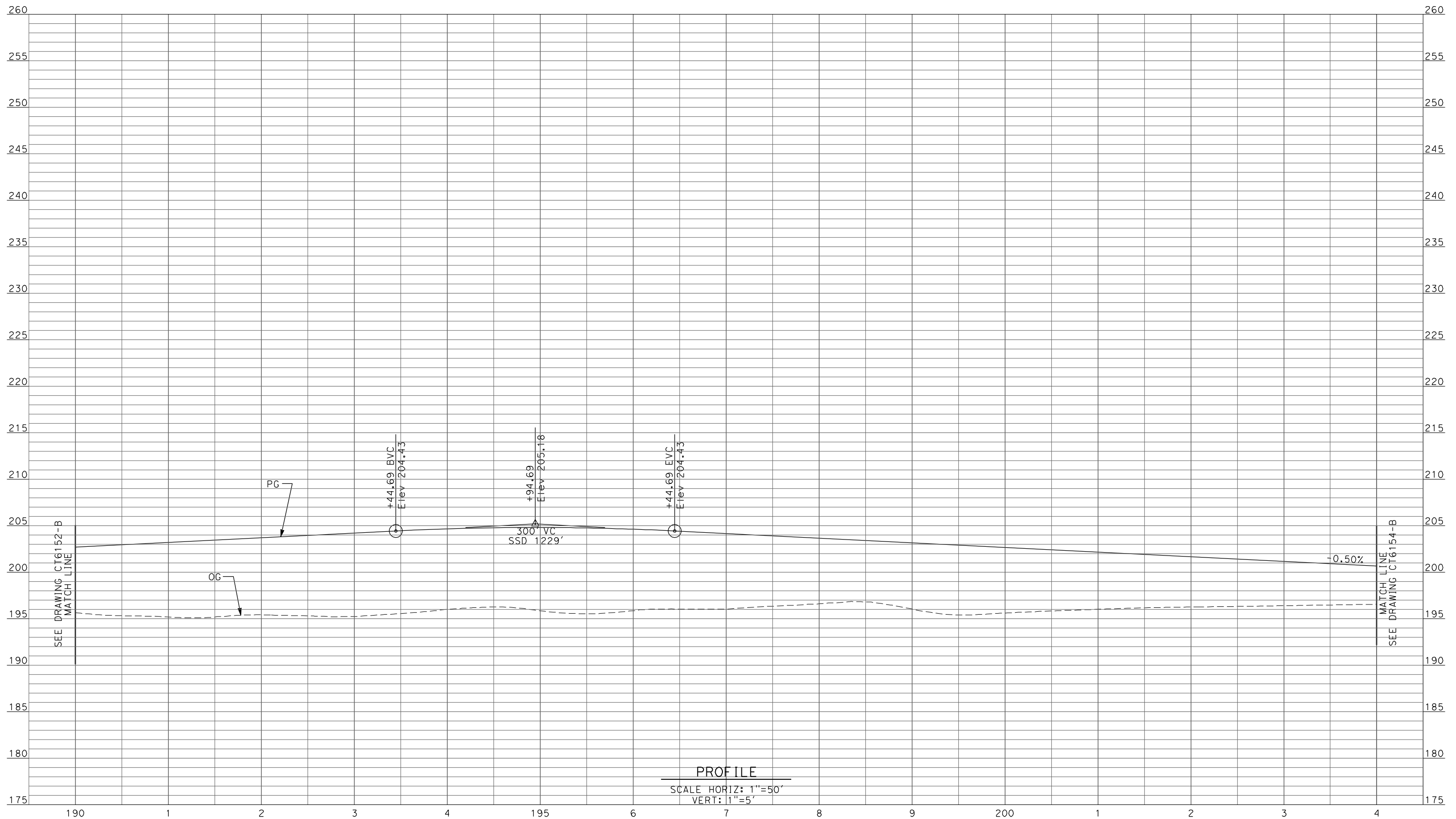


**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**

UPRR/SR99 WYE/MERCED DO - (WC)  
GRADE SEPARATION - AVENUE 25  
PROFILE  
SHEET 3 OF 13

CONTRACT NO. HSR06-007
DRAWING NO. CT6153-B
SCALE AS SHOWN
SHEET NO. ### OF ###





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ReyesC1

REV	DATE	BY	CHK	APP	DESCRIPTION
1	12/28/11	RG			

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 06/30/2011

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

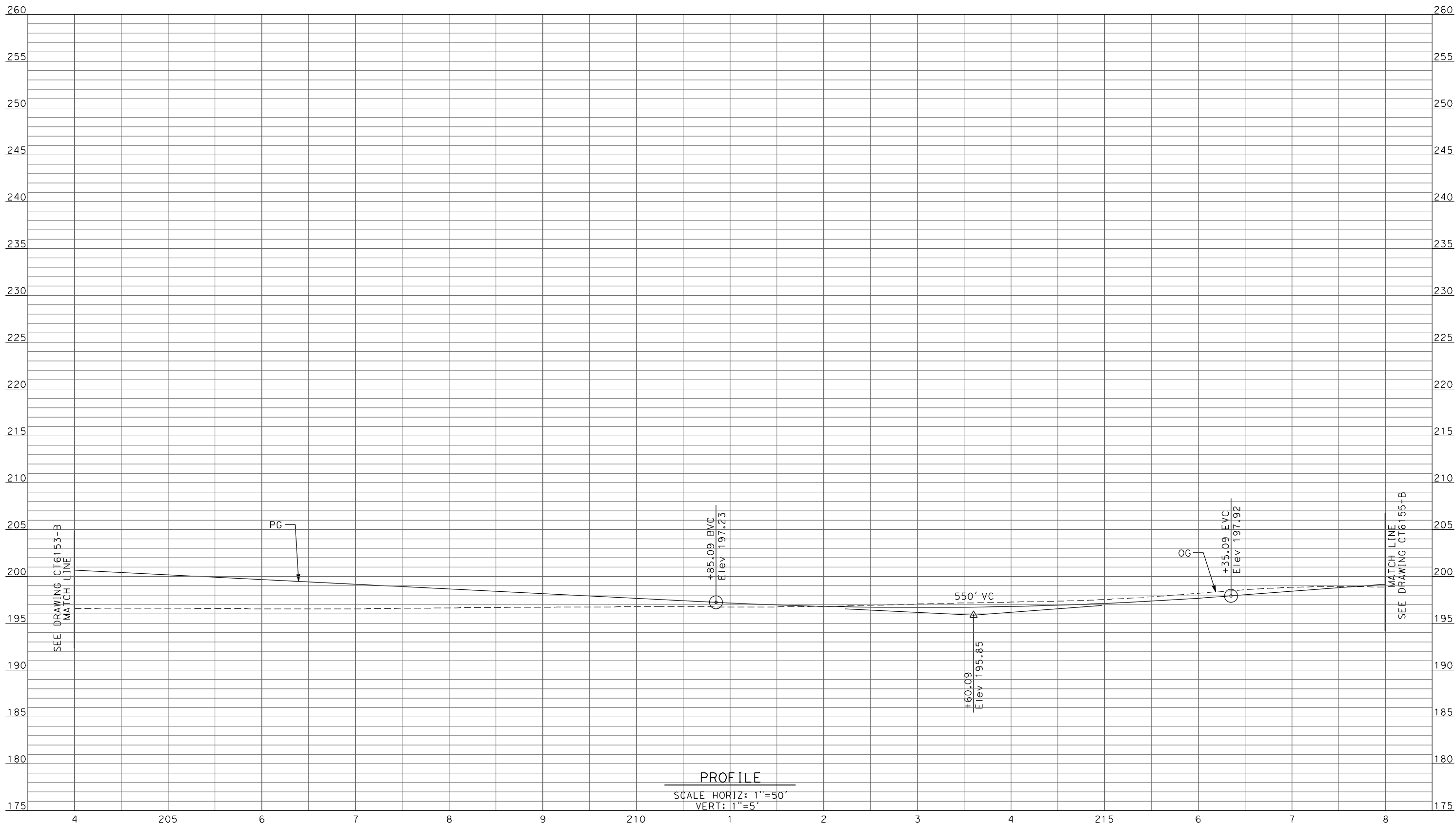
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 WYE/MERCED DO - (WC)  
GRADE SEPARATION - AVENUE 25  
PROFILE  
SHEET 4 OF 13

CONTRACT NO. HSR06-007
DRAWING NO. CT6154-B
SCALE AS SHOWN
SHEET NO. ### OF ###





1/5/2012 1:35:00 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6155-B.dgn

ReyesC1

REV	DATE	BY	CHK	APP	DESCRIPTION
1	12/28/11	RG			

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 06/30/2011

RECORD SET  
15% DESIGN  
SUBMITTAL

NOT FOR  
CONSTRUCTION

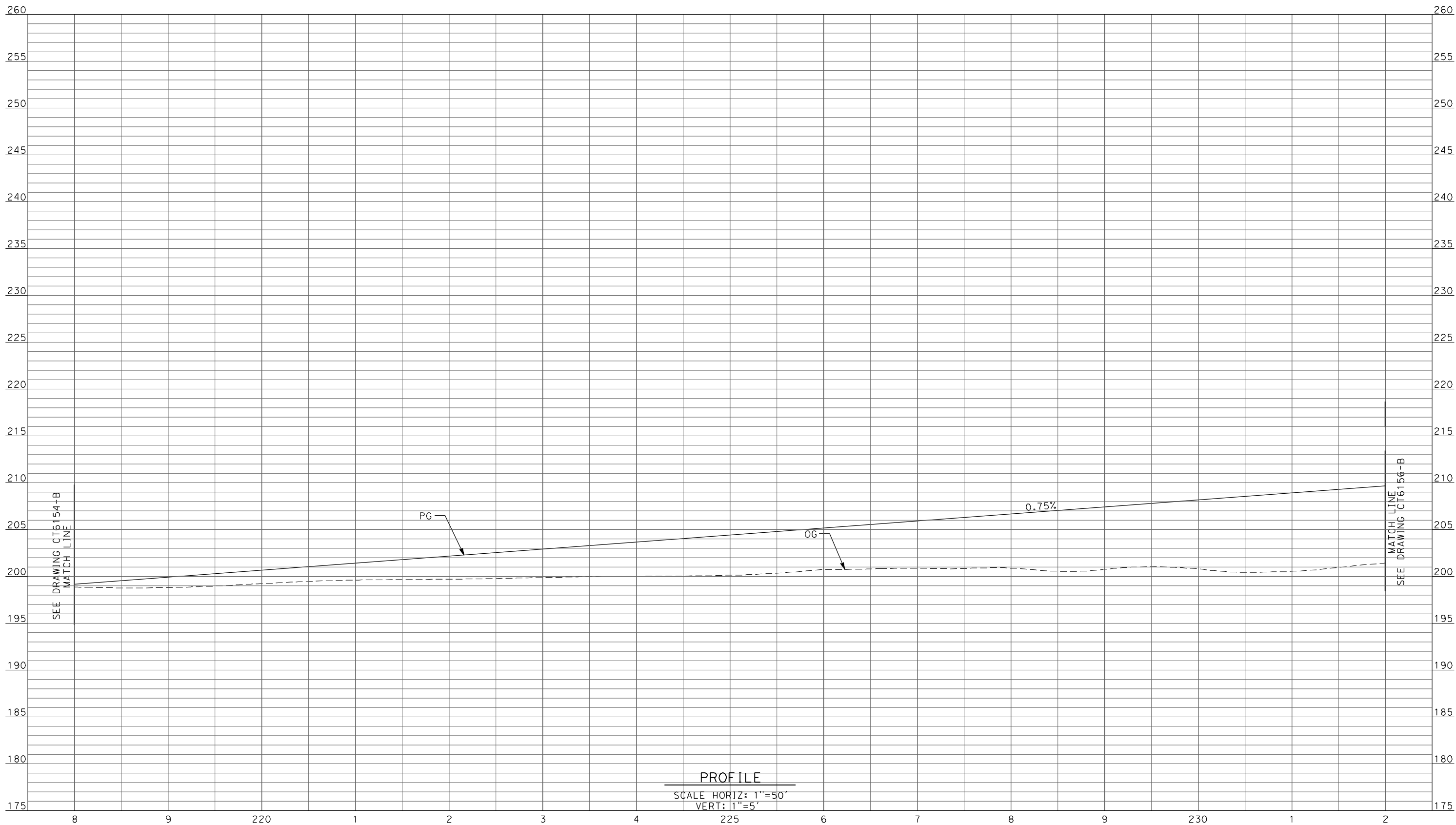


CALIFORNIA  
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO

UPRR/SR99 WYE/MERCED DO - (WC)  
GRADE SEPARATION - AVENUE 25  
PROFILE  
SHEET 5 OF 13

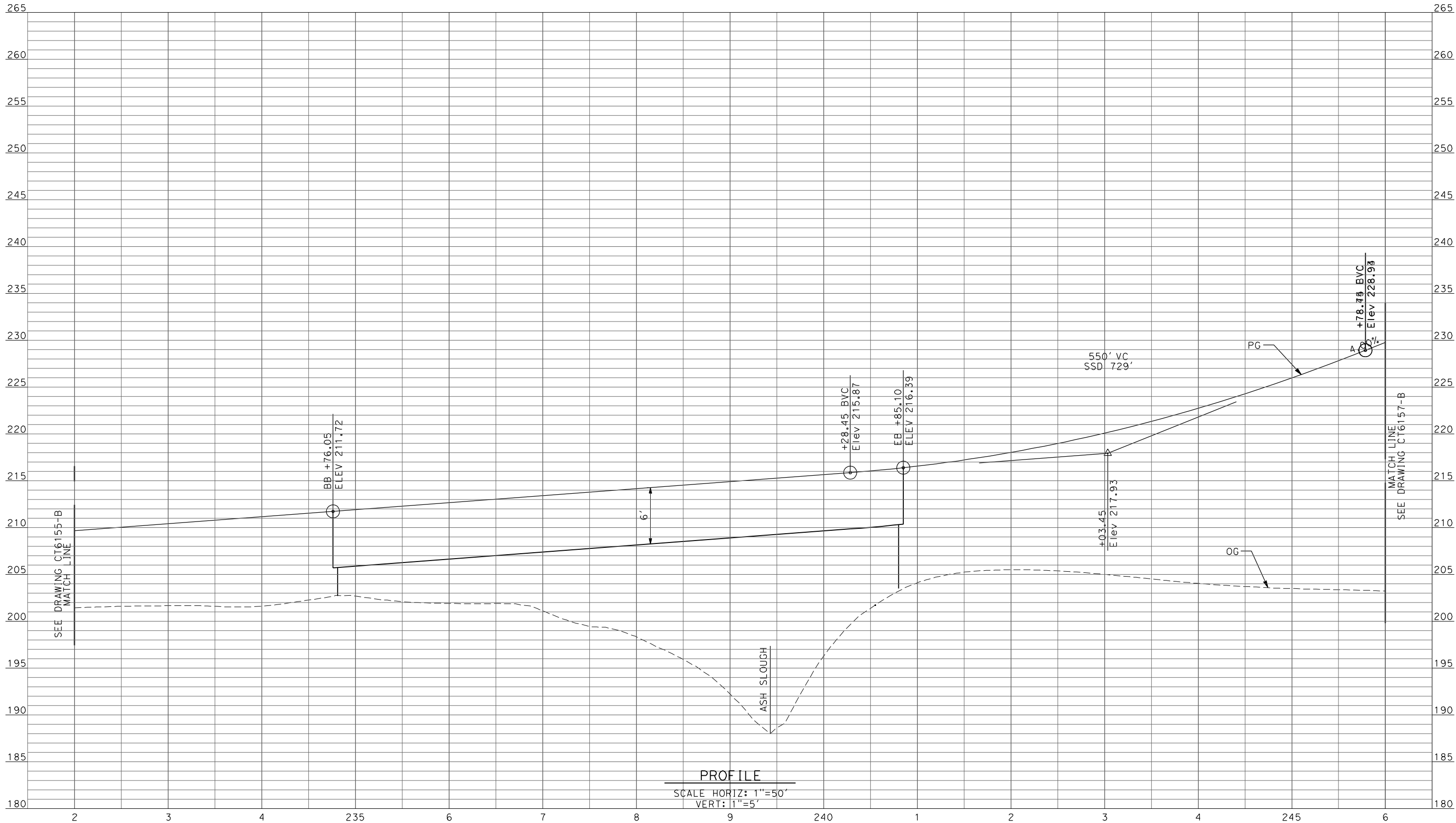
CONTRACT NO. HSR06-007
DRAWING NO. CT6155-B
SCALE AS SHOWN
SHEET NO. ### OF ###





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ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION
1	12/28/11	RG			

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 06/30/2011

RECORD SET  
15% DESIGN  
SUBMITTAL

NOT FOR  
CONSTRUCTION



CALIFORNIA  
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO

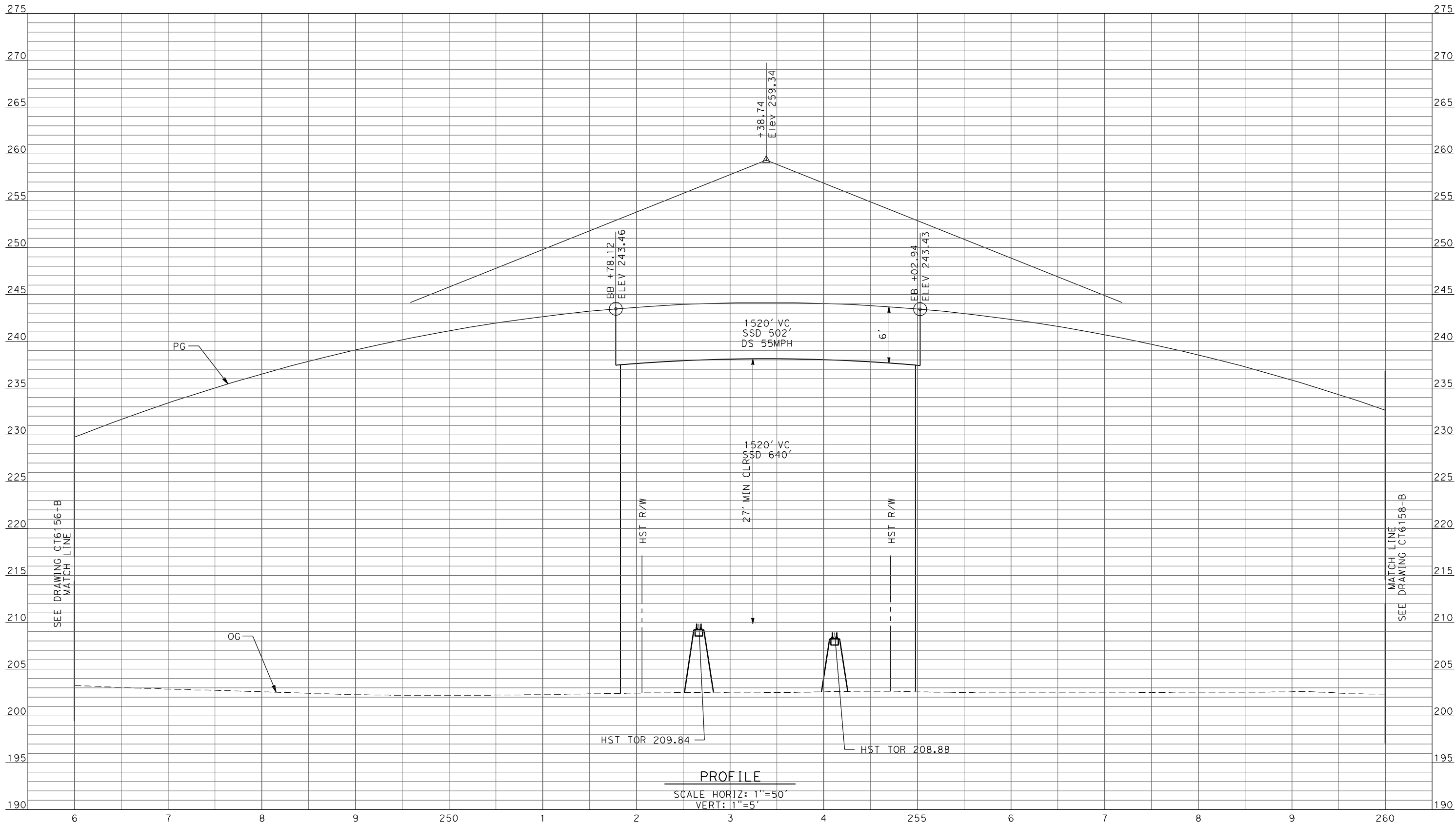
UPRR/SR99 WYE/MERCED DO - (WC)  
GRADE SEPARATION - AVENUE 25  
PROFILE  
SHEET 6 OF 13

CONTRACT NO. HSR06-007
DRAWING NO. CT6156-B
SCALE AS SHOWN
SHEET NO. ### OF ###



1/5/2012 1:35:10 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\Profile\CT6157-B.dgn

ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION
1	12/28/11	RG			

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 06/30/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**

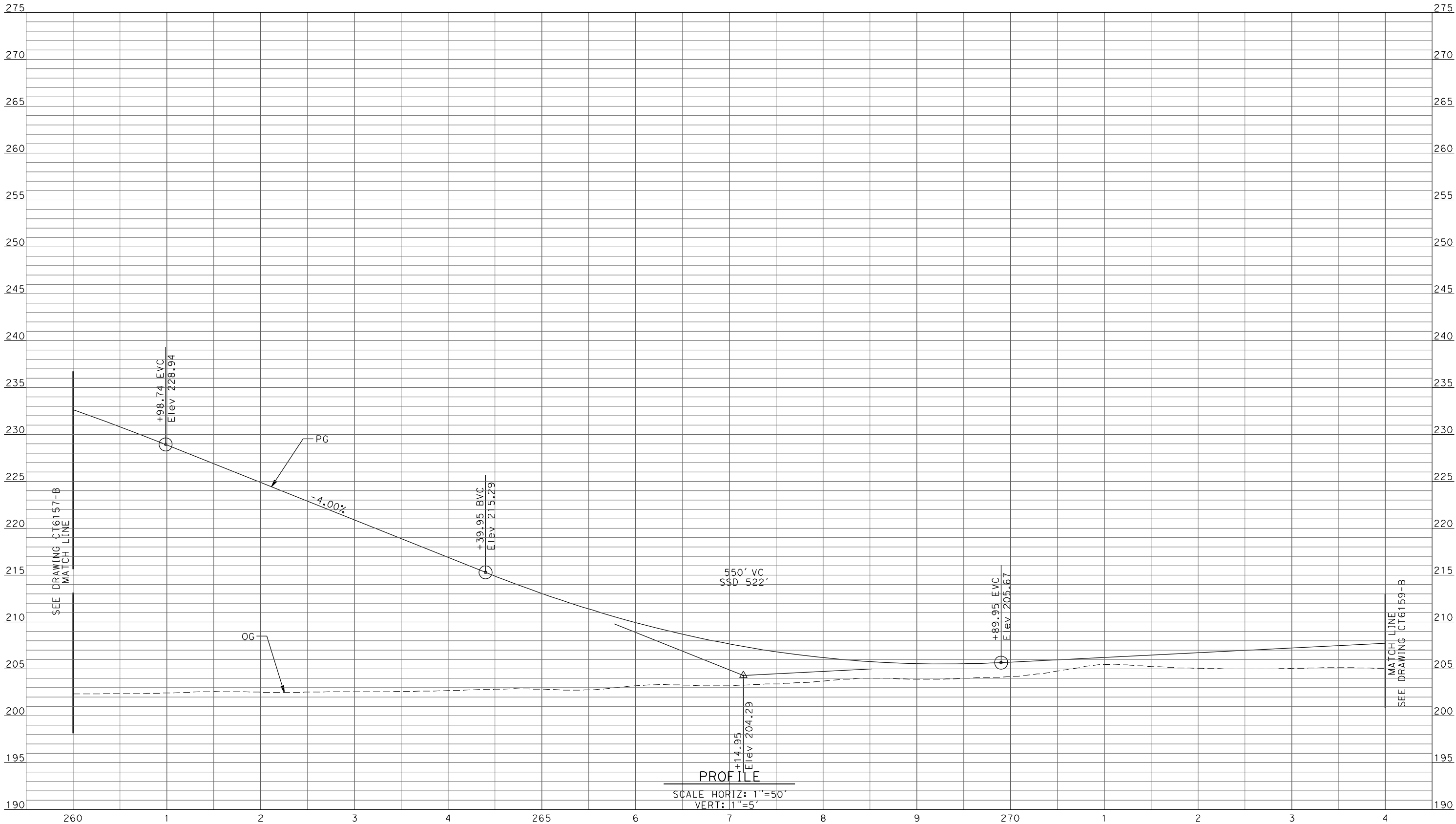
UPRR/SR99 WYE/MERCED DO - (WC)  
GRADE SEPARATION - AVENUE 25  
PROFILE  
SHEET 7 OF 13

CONTRACT NO. HSR06-007
DRAWING NO. CT6157-B
SCALE AS SHOWN
SHEET NO. ### OF ###



1/5/2012 1:35:15 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6158-B.dgn

ReyesC1



1	12/28/11	RG			
REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 06/30/2011

RECORD SET  
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SUBMITTAL

NOT FOR  
CONSTRUCTION



CALIFORNIA  
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO

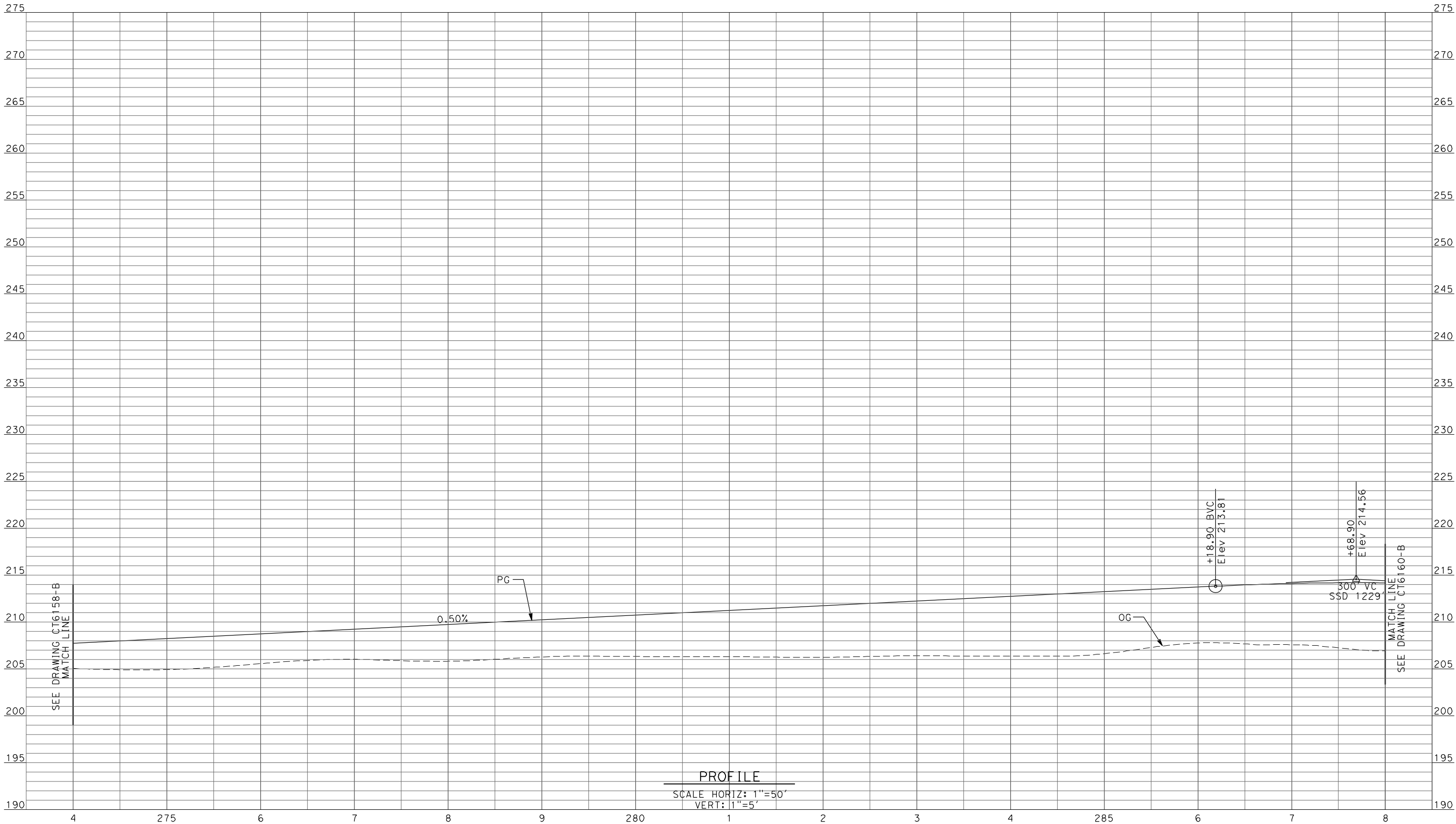
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GRADE SEPARATION - AVENUE 25  
PROFILE  
SHEET 8 OF 13

CONTRACT NO. HSR06-007
DRAWING NO. CT6158-B
SCALE AS SHOWN
SHEET NO. ### OF ###



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ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION
1	12/28/11	RG			

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 06/30/2011

RECORD SET  
15% DESIGN  
SUBMITTAL

NOT FOR  
CONSTRUCTION



CALIFORNIA  
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO

UPRR/SR99 WYE/MERCED DO - (WC)  
GRADE SEPARATION - AVENUE 25  
PROFILE  
SHEET 9 OF 13

CONTRACT NO. HSR06-007
DRAWING NO. CT6159-B
SCALE AS SHOWN
SHEET NO. ### OF ###



1/5/2012 1:35:25 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6160-B.dgn

ReyesC1

REV	DATE	BY	CHK	APP	DESCRIPTION
1	12/28/11	RG			

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 06/30/2011

RECORD SET  
15% DESIGN  
SUBMITTAL

NOT FOR  
CONSTRUCTION

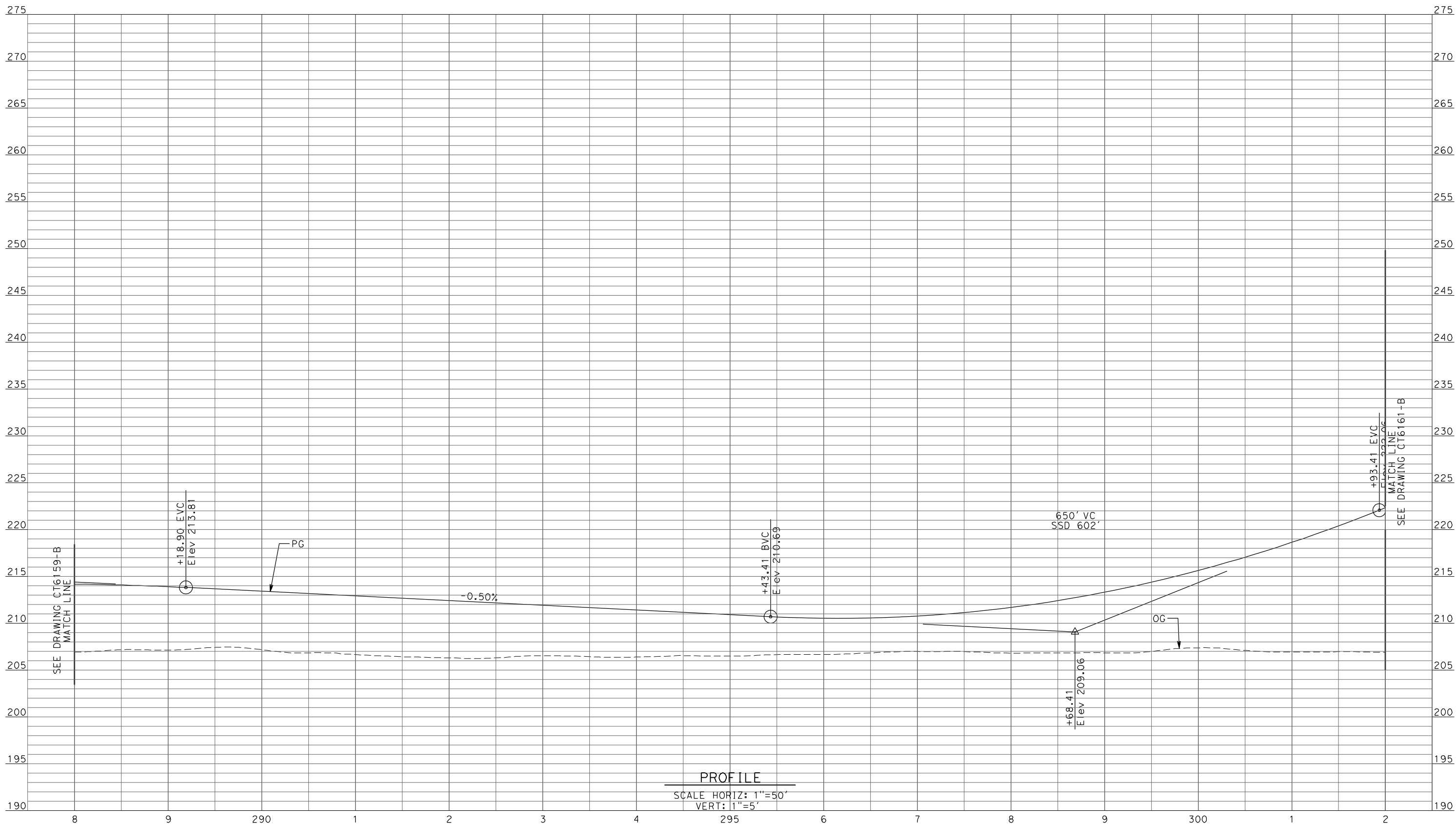


CALIFORNIA  
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO

UPRR/SR99 WYE/MERCED DO - (WC)  
GRADE SEPARATION - AVENUE 25  
PROFILE  
SHEET 10 OF 13

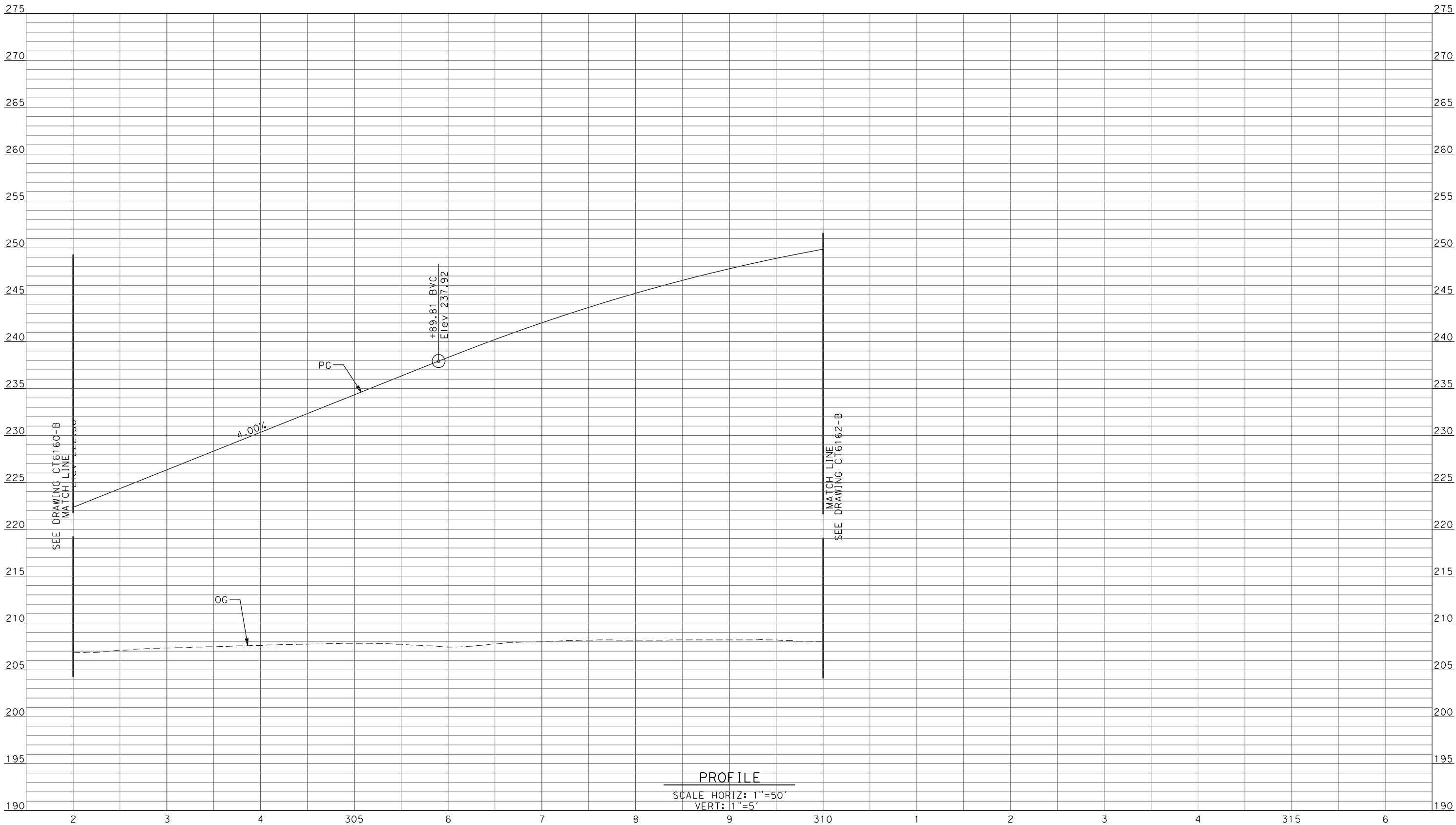
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DRAWING NO. CT6160-B
SCALE AS SHOWN
SHEET NO. ### OF ###





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ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION
1	12/28/11	RG			

DESIGNED BY D. AYELE
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CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 06/30/2011

RECORD SET  
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SUBMITTAL

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CALIFORNIA  
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO

UPRR/SR99 WYE/MERCED DO - (WC)  
GRADE SEPARATION - AVENUE 25  
PROFILE  
SHEET 11 OF 13

CONTRACT NO. HSR06-007
DRAWING NO. CT6161-B
SCALE AS SHOWN
SHEET NO. ### OF ###



1/5/2012 1:35:35 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\Profile\CT6162-B.dgn

ReyesC1

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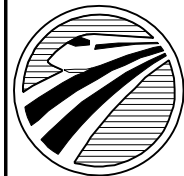
DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 06/30/2011

**RECORD SET**  
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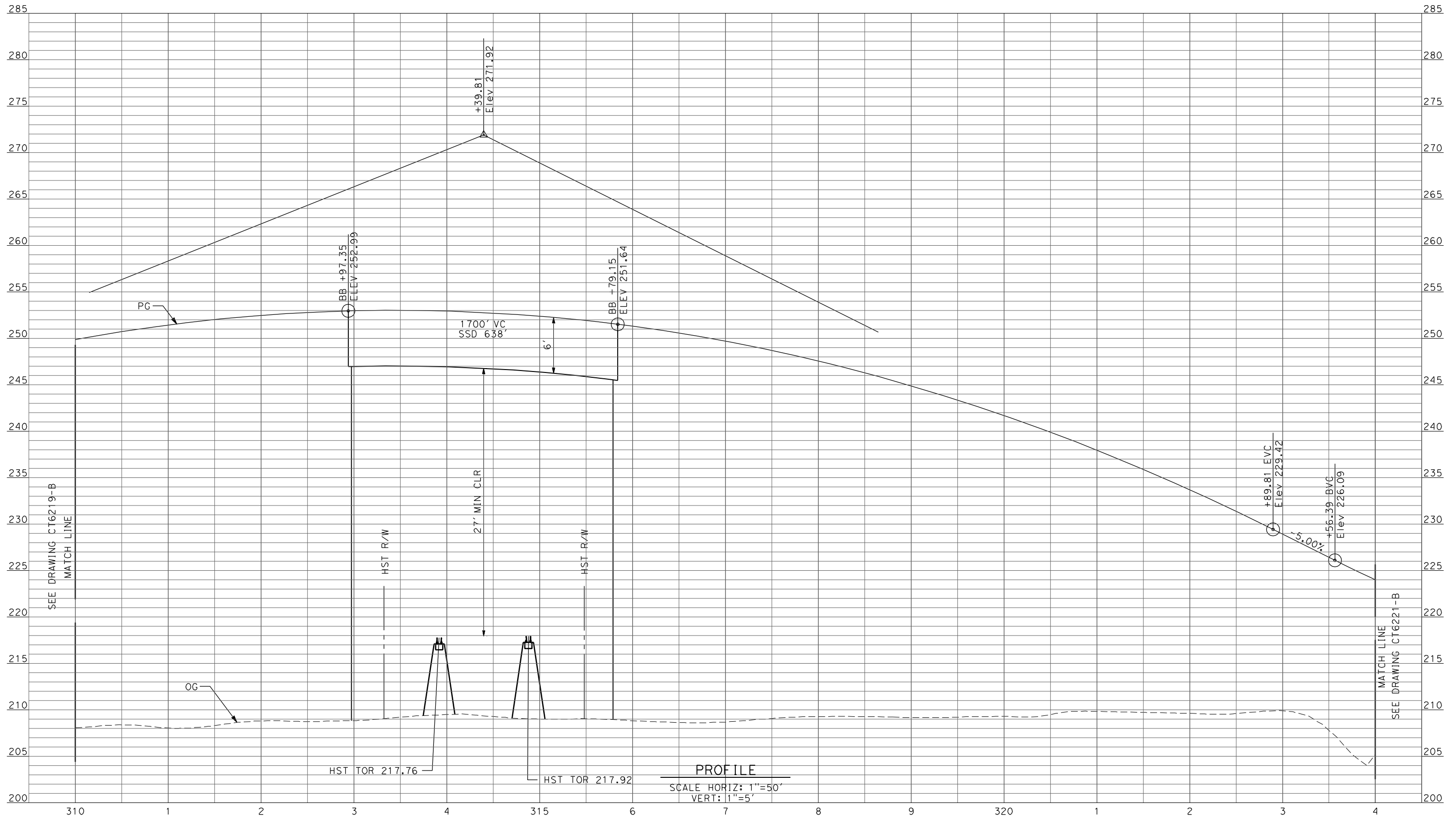
**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 WYE/MERCED DO - (WC)  
GRADE SEPARATION - AVENUE 25  
PROFILE  
SHEET 12 OF 13

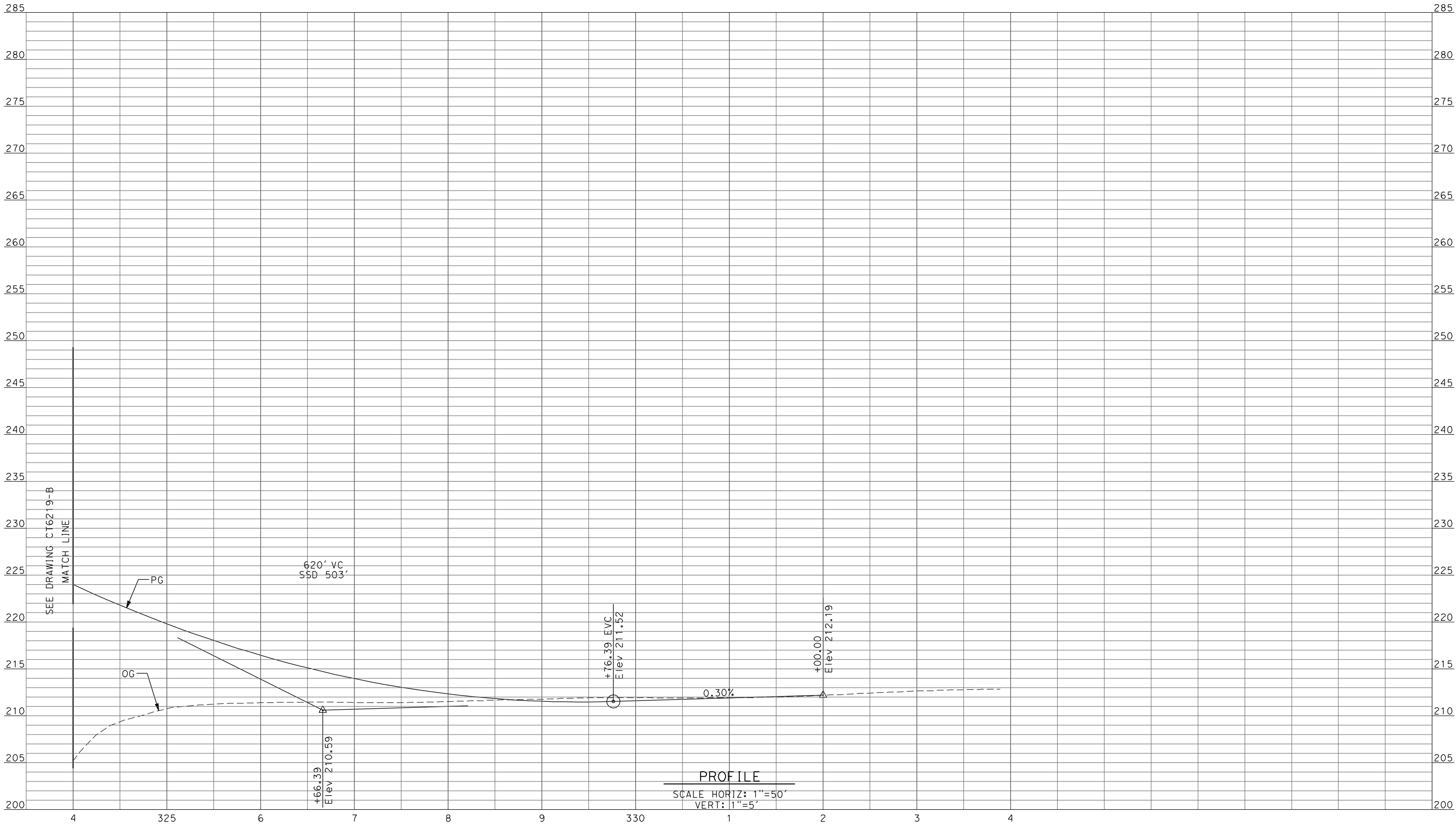
CONTRACT NO. HSR06-007
DRAWING NO. CT6162-B
SCALE AS SHOWN
SHEET NO. ### OF ###





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ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION
1	12/28/11	RG			

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 06/30/2011

RECORD SET  
15% DESIGN  
SUBMITTAL

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CONSTRUCTION



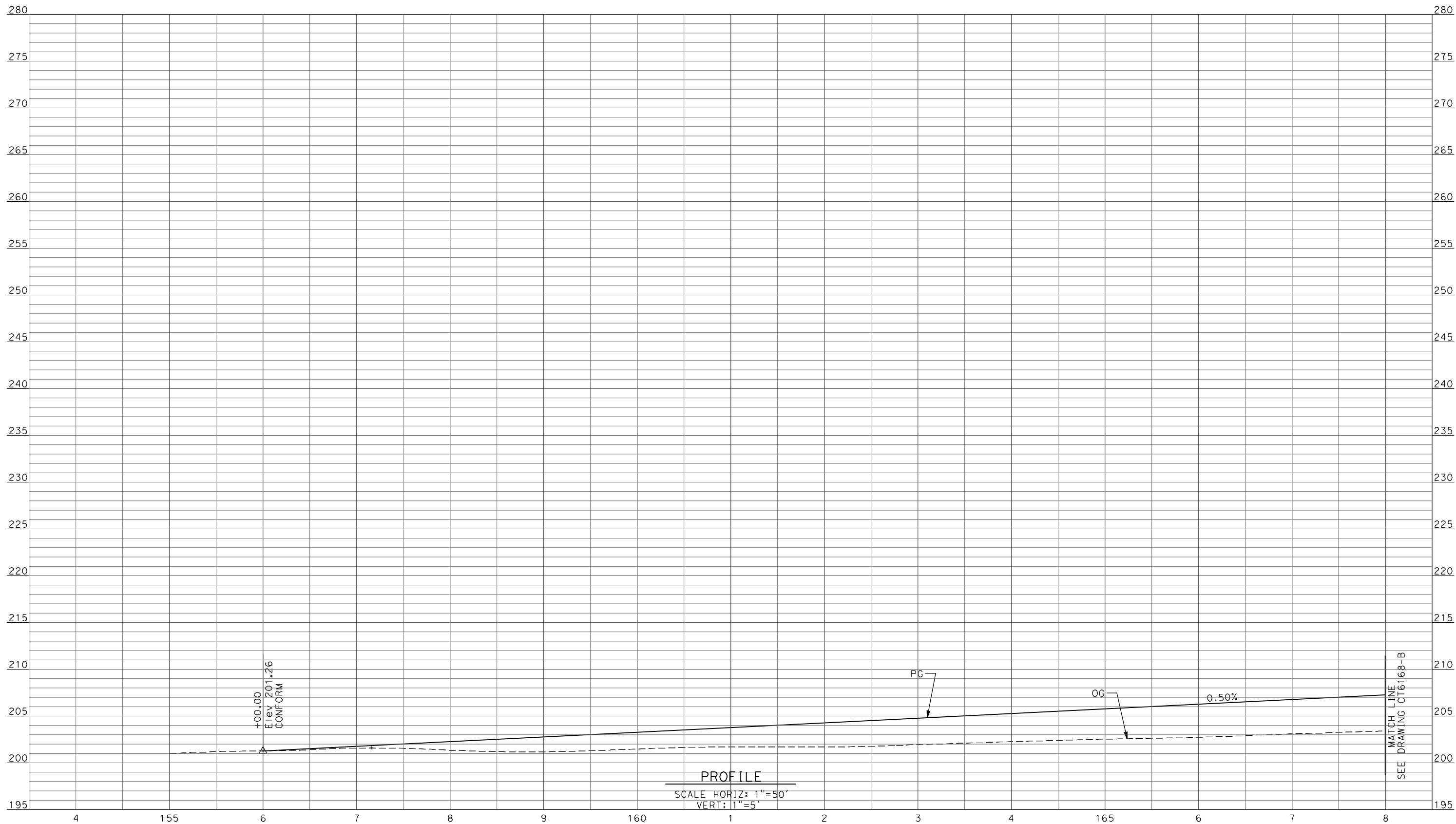
CALIFORNIA  
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO

UPRR/SR99 WYE/MERCED DO - (WC)  
GRADE SEPARATION - AVENUE 25  
PROFILE  
SHEET 13 OF 13

CONTRACT NO. HSR06-007
DRAWING NO. CT6163-B
SCALE AS SHOWN
SHEET NO. ### OF ###





**RECORD SET  
15% DESIGN  
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CONSTRUCTION**

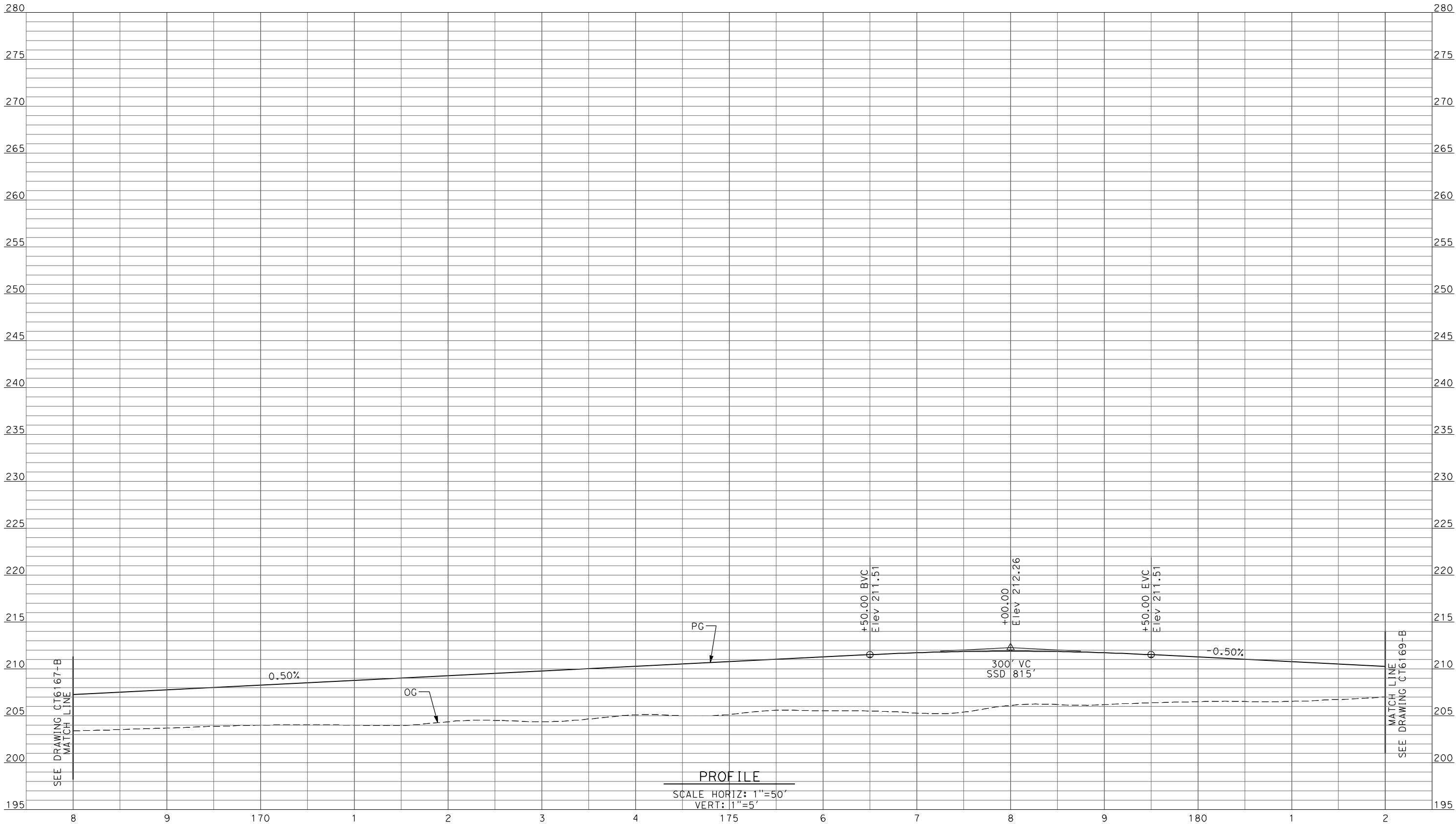


CONTRACT NO.	HSR06-007
DRAWING NO.	CT6167-B
SCALE	AS SHOWN
SHEET NO.	### OF ###



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ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**

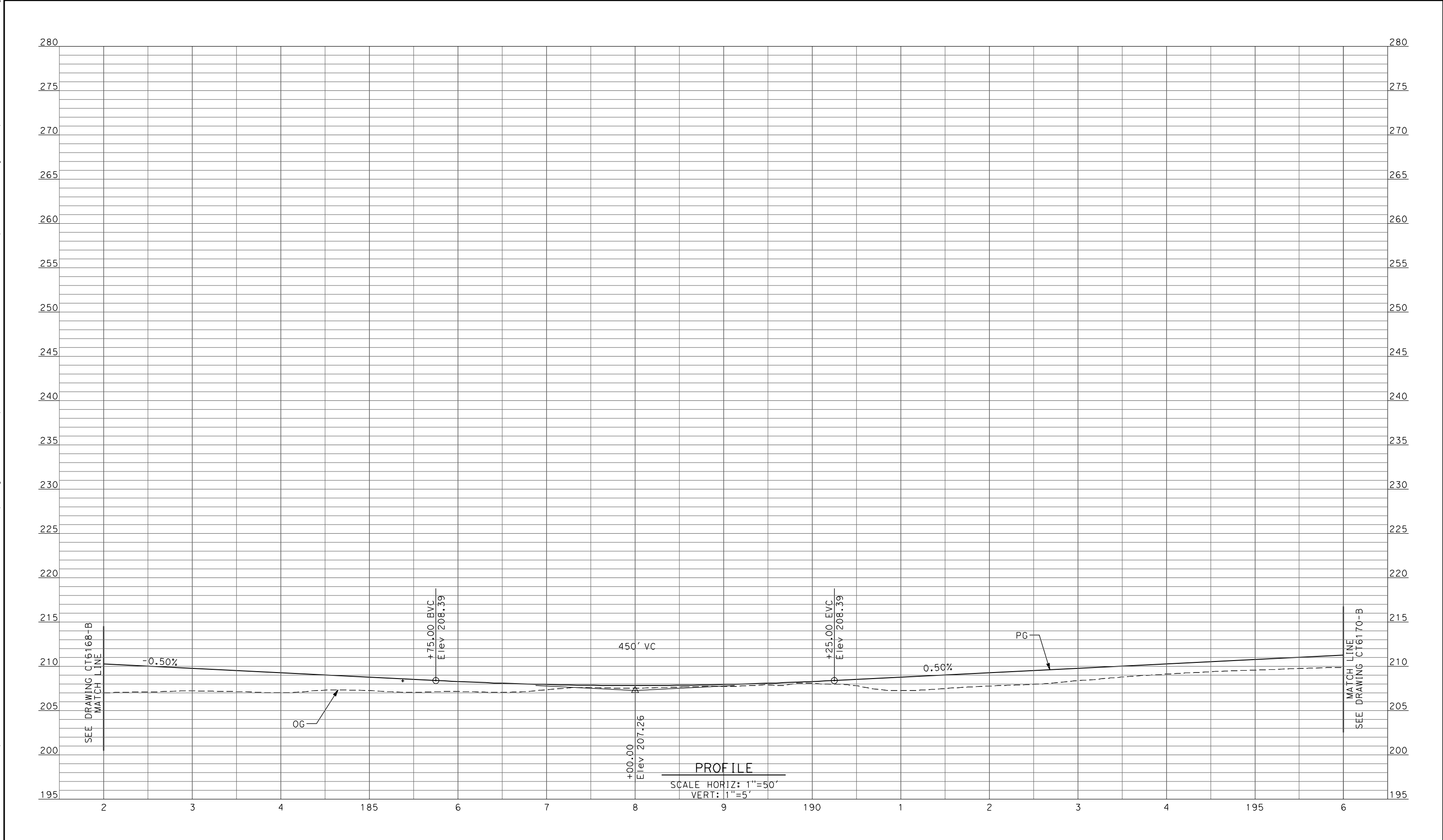
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GRADE SEPARATION - AVENUE 26 ALT 1  
PROFILE  
SHEET 2 OF 10

CONTRACT NO. HSR06-007
DRAWING NO. CT6168-B
SCALE AS SHOWN
SHEET NO. ### OF ###



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ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**  
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**SUBMITTAL**

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**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**

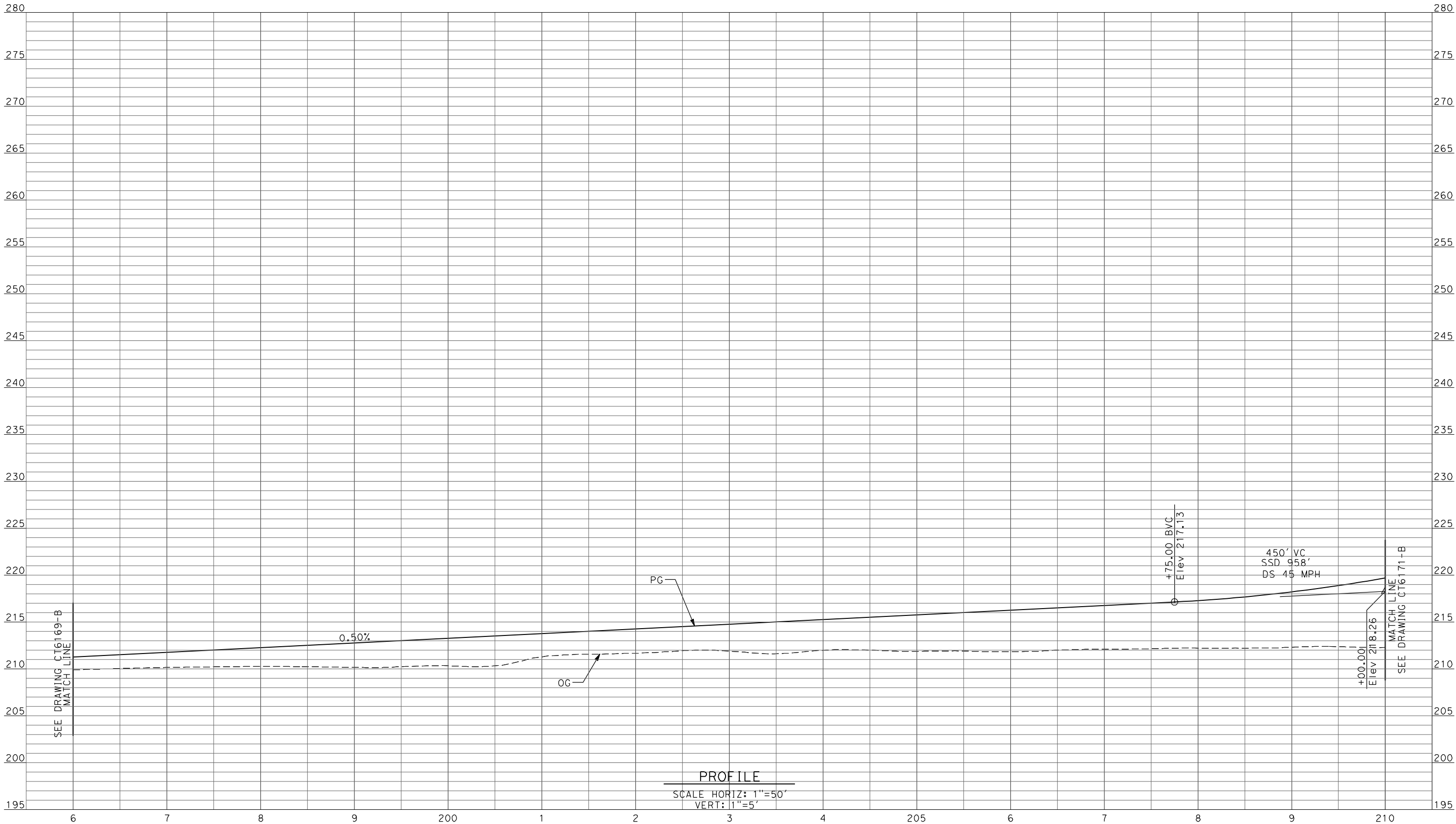
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GRADE SEPARATION - AVENUE 26 ALT 1  
PROFILE  
SHEET 3 OF 10

CONTRACT NO. HSR06-007
DRAWING NO. CT6169-B
SCALE AS SHOWN
SHEET NO. ### OF ###



4/27/2011 6:41:17 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6170-B.dgn

ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

RECORD SET  
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SUBMITTAL

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CALIFORNIA  
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO

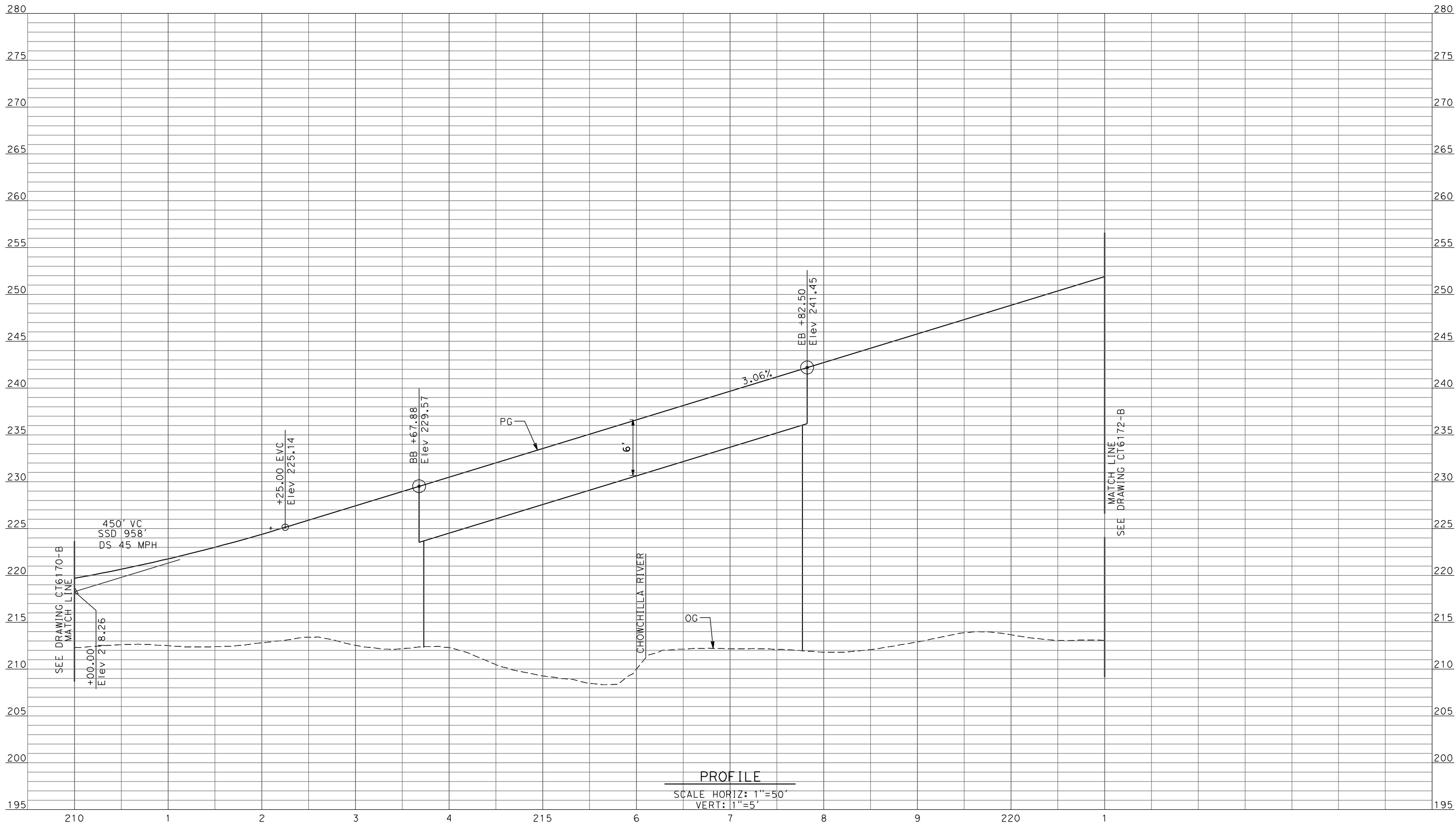
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GRADE SEPARATION - AVENUE 26 ALT 1  
PROFILE  
SHEET 4 OF 10

CONTRACT NO. HSR06-007
DRAWING NO. CT6170-B
SCALE AS SHOWN
SHEET NO. ### OF ###



4/27/2011 6:41:22 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6171-B.dgn

ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE

DRAWN BY  
C. DELOS REYES

CHECKED BY  
A. SILVER

IN CHARGE  
A. BOONE

DATE  
04/29/2011

**RECORD SET**  
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**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**

UPRR/SR99 WYE/MERCED DO - (WC)  
GRADE SEPARATION - AVENUE 26 ALT 1  
PROFILE  
SHEET 5 OF 10

CONTRACT NO.  
HSR06-007

DRAWING NO.  
CT6171-B

SCALE  
AS SHOWN

SHEET NO.  
### OF ###





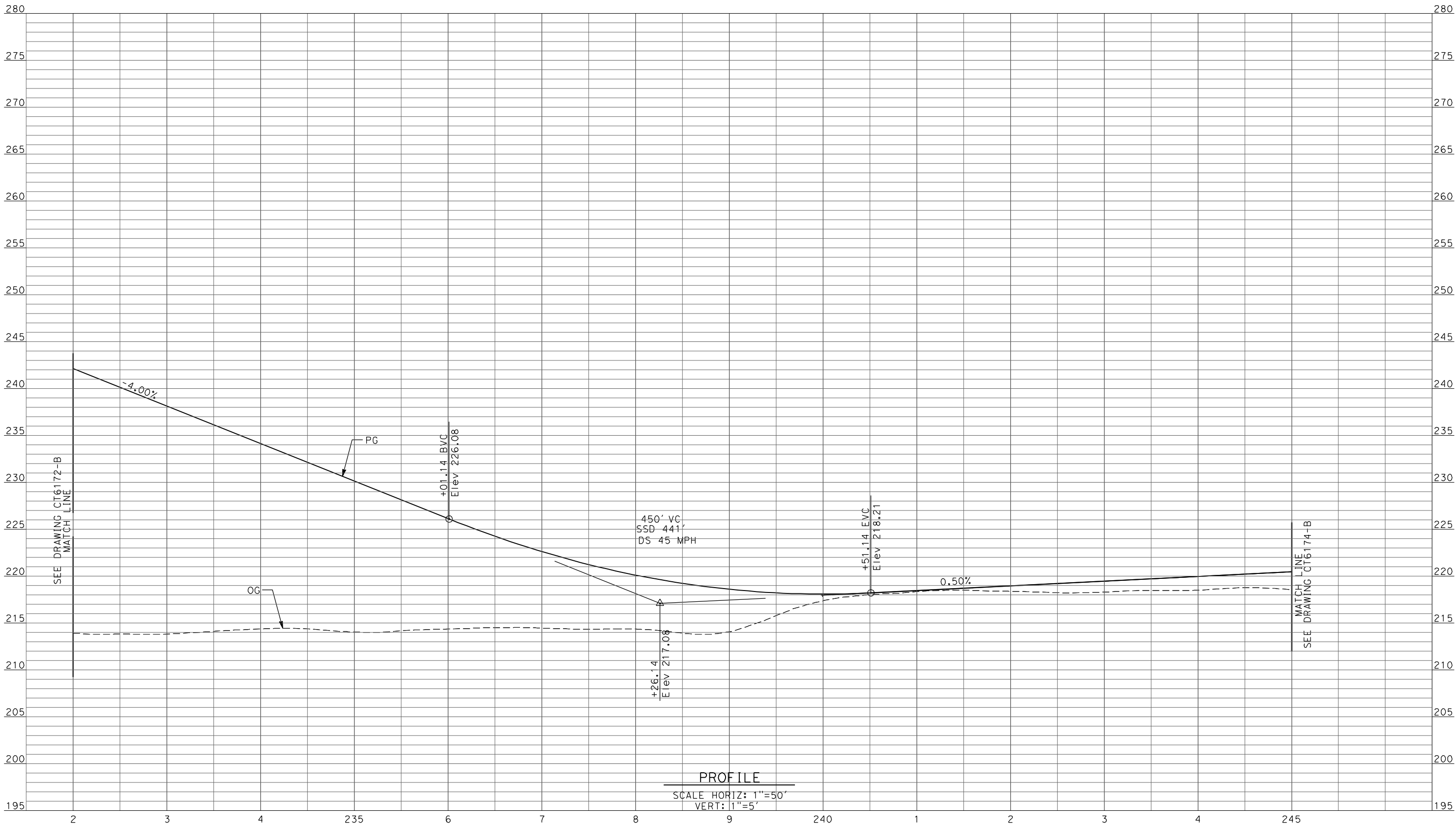
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GRADE SEPARATION - AVENUE 26 ALT 1  
PROFILE  
SHEET 6 OF 10

CONTRACT NO.	HSR06-007
DRAWING NO.	CT6172-B
SCALE	AS SHOWN
SHEET NO.	### OF ###



4/27/2011 6:41:33 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\Profile\CT6173-B.dgn

ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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**CH2MHILL**



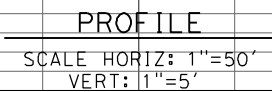
**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**

UPRR/SR99 WYE/MERCED DO - (WC)  
GRADE SEPARATION - AVENUE 26 ALT 1  
PROFILE  
SHEET 7 OF 10

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT6173-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###





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CHECKED BY	A. SILVER
IN CHARGE	A. BOONE
DATE	04/29/2011

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CONSTRUCTION**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

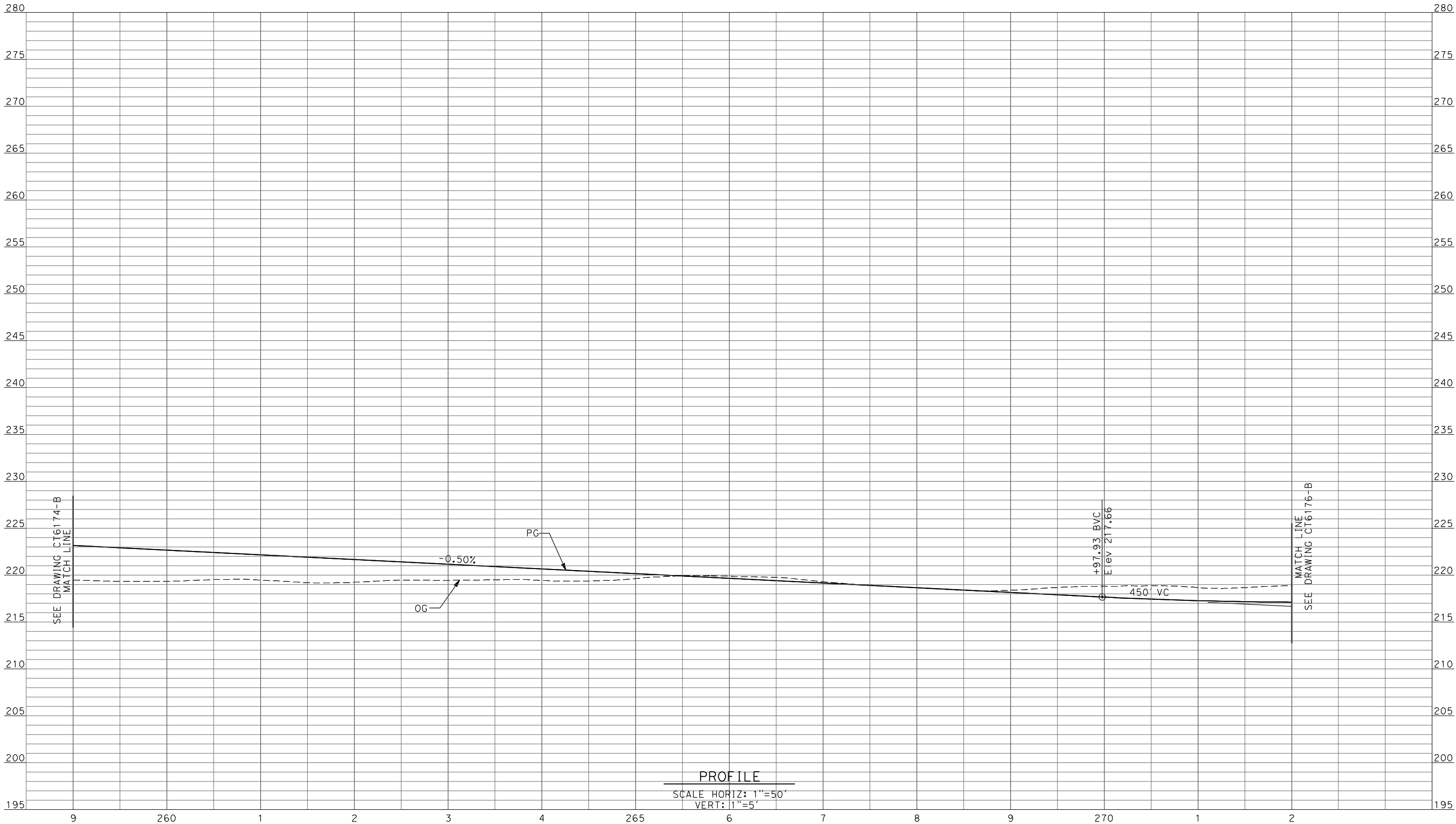
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GRADE SEPARATION - AVENUE 26 ALT 1  
PROFILE  
SHEET 8 OF 10

CONTRACT NO. HSR06-007
DRAWING NO. CT6174-B
SCALE AS SHOWN
SHEET NO. ### OF ###



4/27/2011 6:41:43 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6175-B.dgn

ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY D. AYELE
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CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET  
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**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**

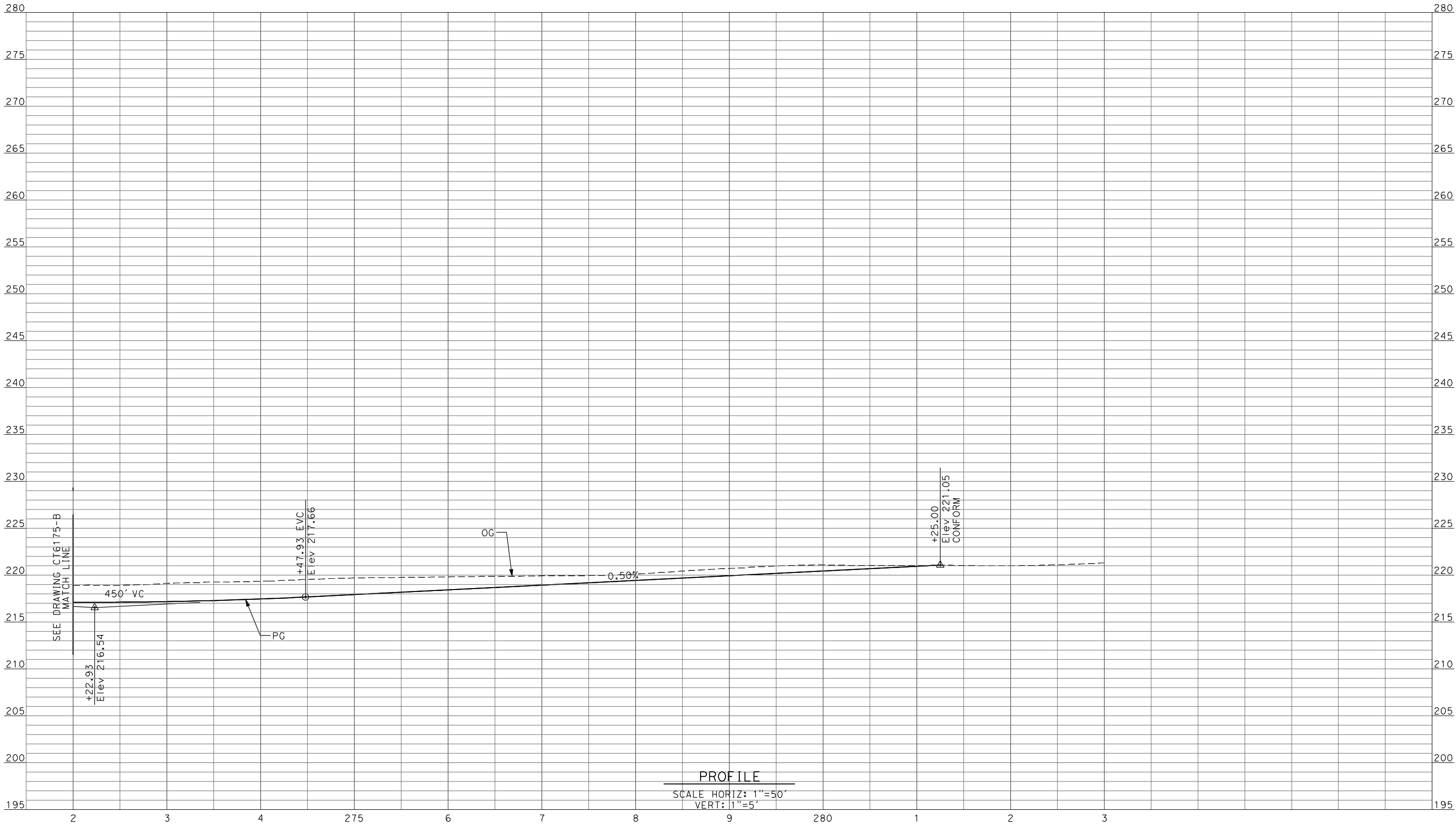
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GRADE SEPARATION - AVENUE 26 ALT 1  
PROFILE  
SHEET 9 OF 10

CONTRACT NO. HSR06-007
DRAWING NO. CT6175-B
SCALE AS SHOWN
SHEET NO. ### OF ###



4/27/2011 6:41:48 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6176-B.dgn

ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET  
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**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**

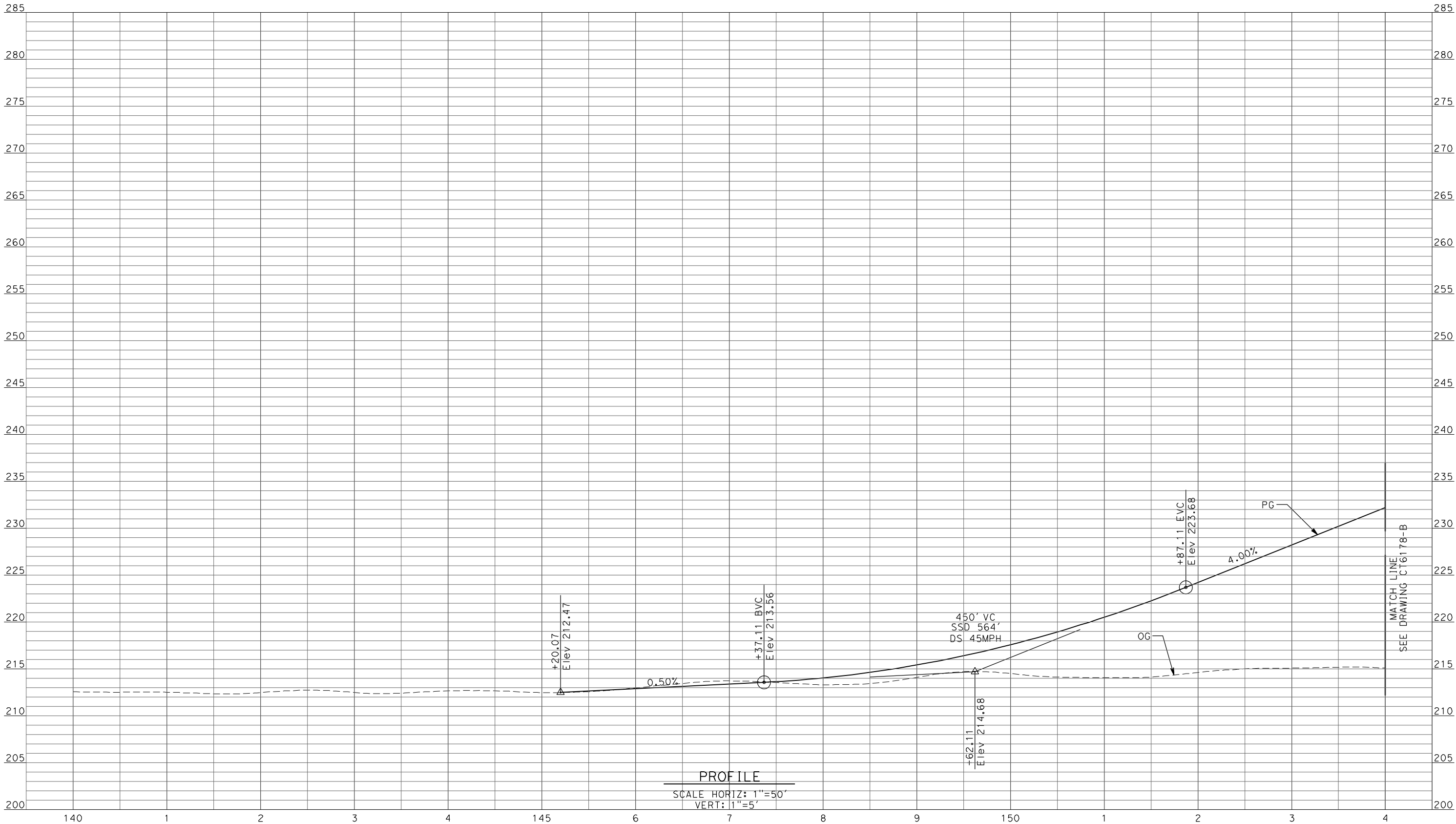
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GRADE SEPARATION - AVENUE 26 ALT 1  
PROFILE  
SHEET 10 OF 10

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT6176-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 6:41:53 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6177-B.dgn

ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET**  
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Sacramento, CA 95811  
**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

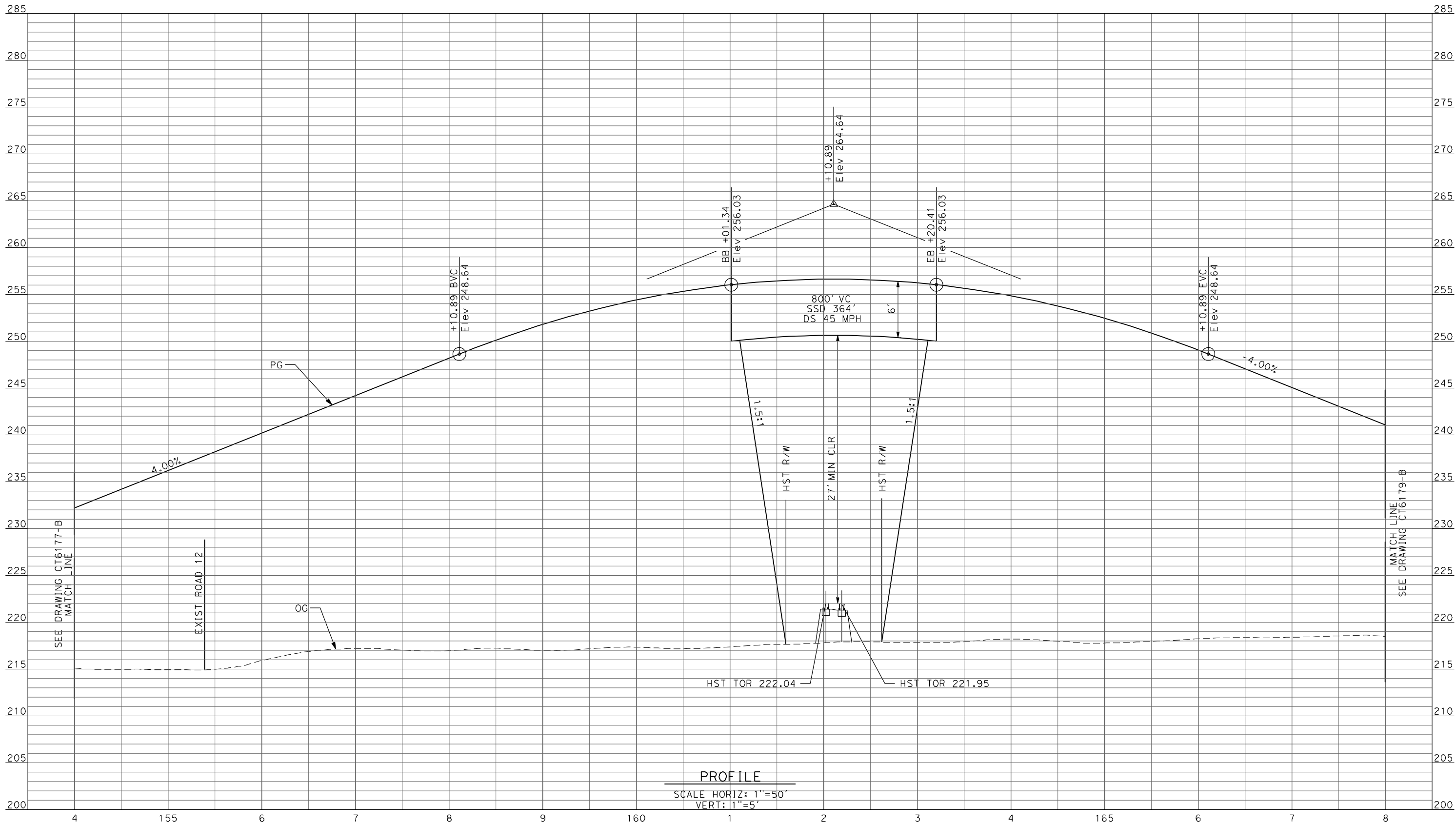
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MERCED DO - (WC)  
GRADE SEPARATION - CROSS ROAD  
PROFILE  
SHEET 1 OF 3

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT6177-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 6:41:58 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\Profile\CT6178-B.dgn

ReyesC1



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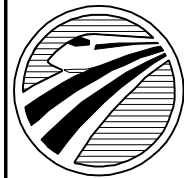
DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

**RECORD SET**  
**15% DESIGN**  
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Sacramento, CA 95811

**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**

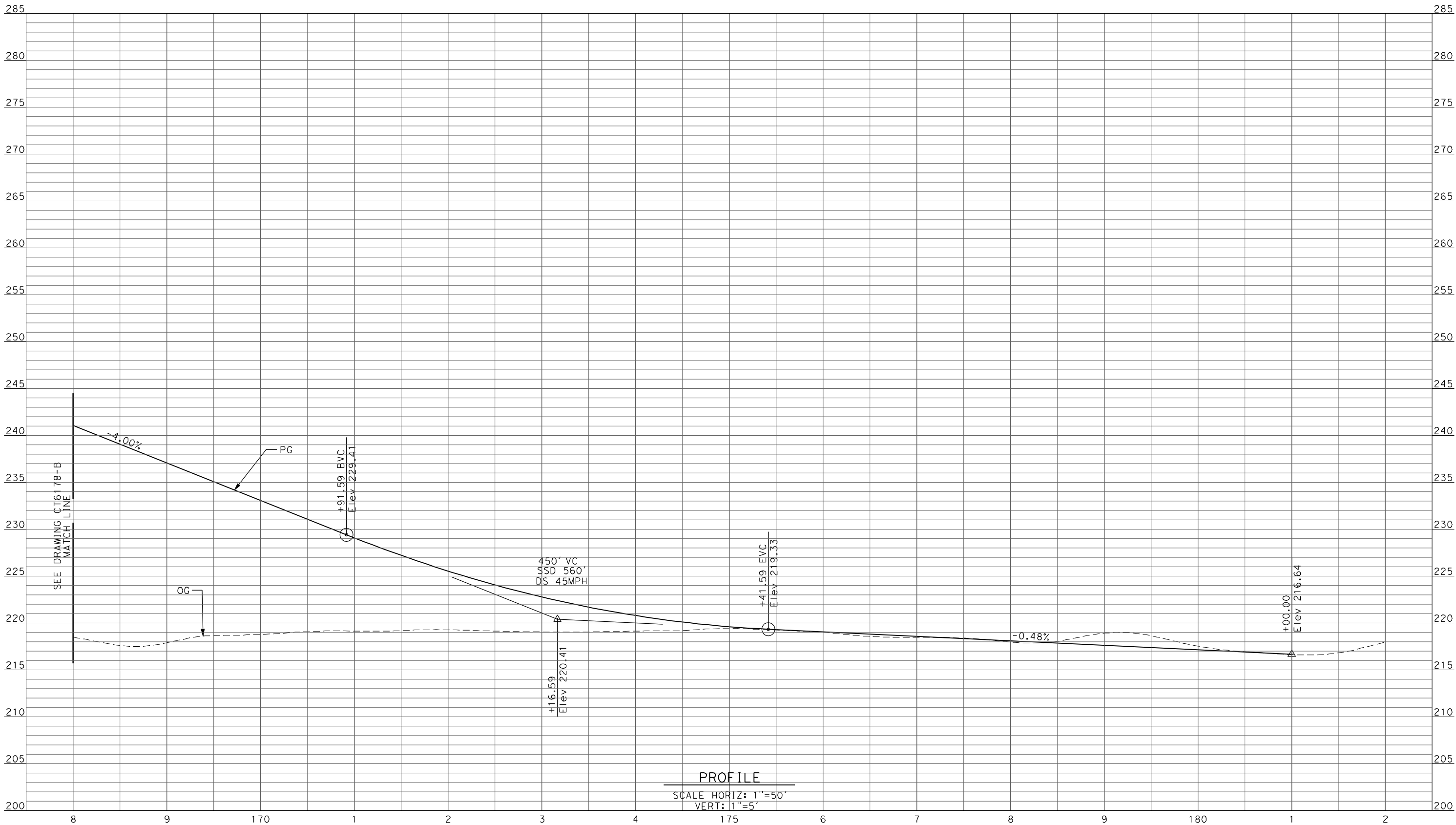
UPRR/SR99 MERCED DO - (WC)  
GRADE SEPARATION - CROSS ROAD  
PROFILE  
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT6178-B
SCALE AS SHOWN
SHEET NO. ### OF ###



4/27/2011 6:42:03 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6179-B.dgn

ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

RECORD SET  
15% DESIGN  
SUBMITTAL

NOT FOR  
CONSTRUCTION



CALIFORNIA  
HIGH-SPEED RAIL AUTHORITY

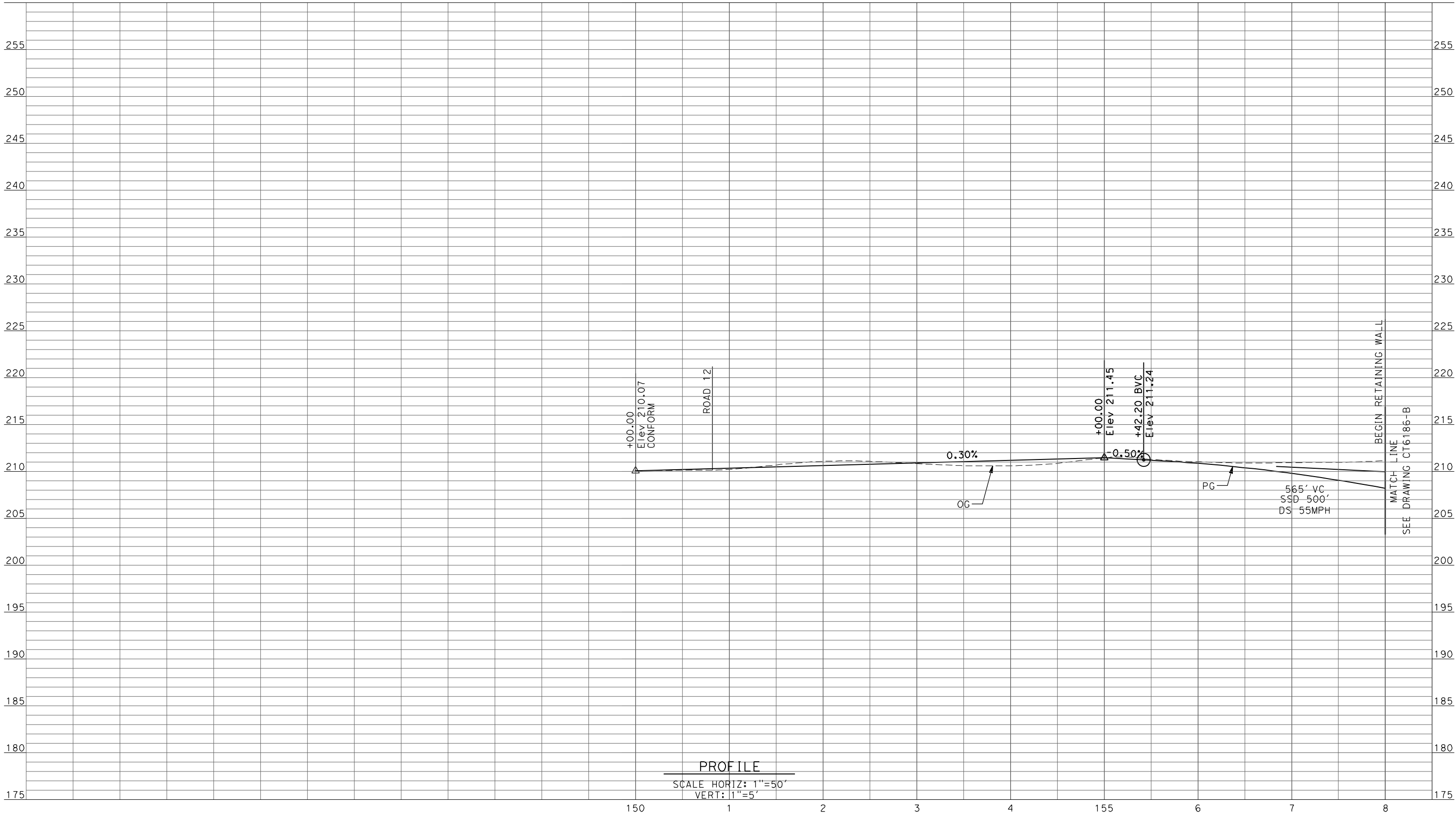
CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO  
UPRR/SR99 MERCED DO - (WC)  
GRADE SEPARATION - CROSS ROAD  
PROFILE  
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT6179-B
SCALE AS SHOWN
SHEET NO. ### OF ###



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ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

RECORD SET  
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CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO  
UPRR/SR99 WYE/MERCED DO - (WC)  
UNDERPASS - AVENUE 26 ALT 2  
PROFILE  
SHEET 1 OF 3

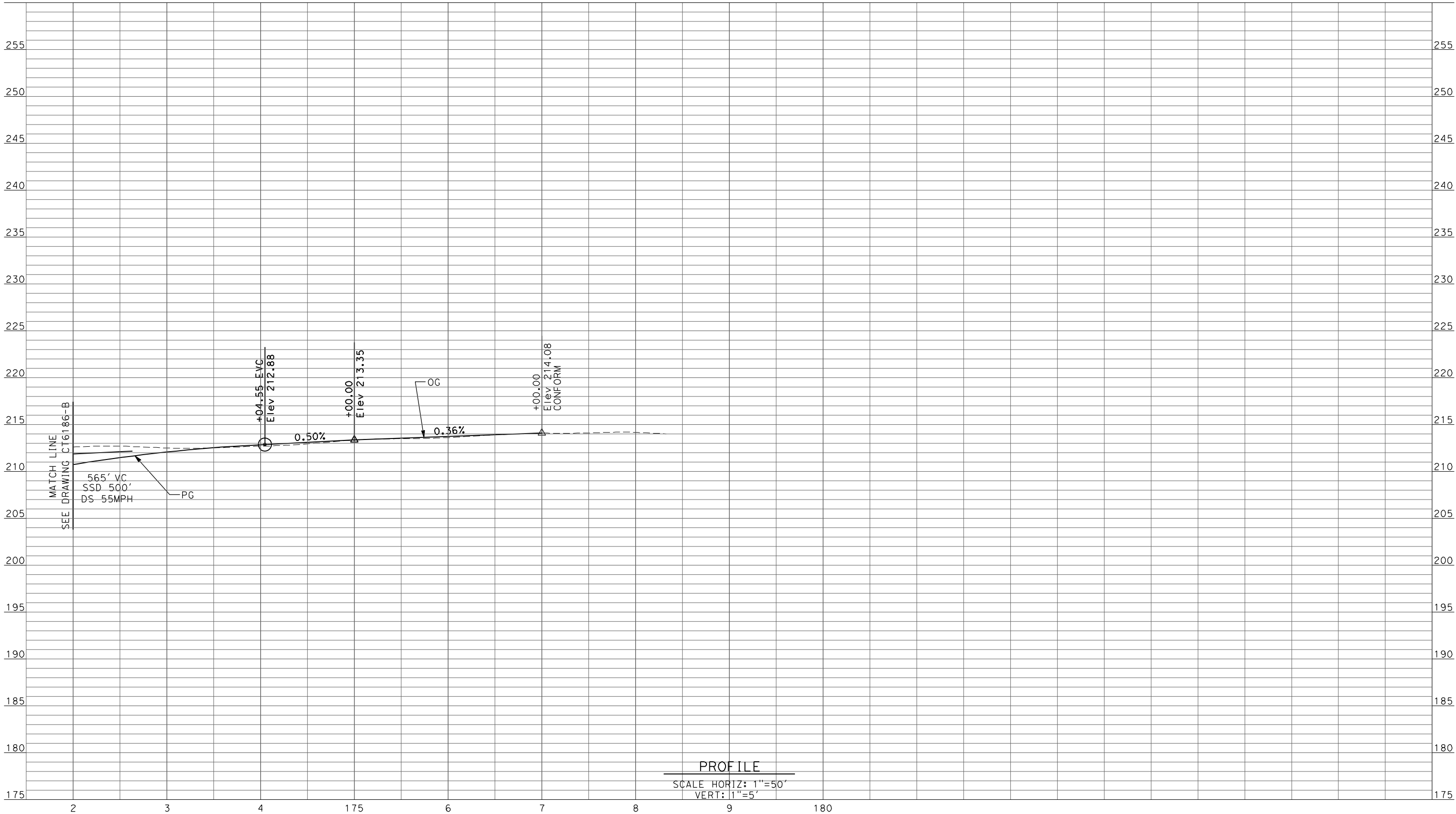
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DRAWING NO. CT6185-B
SCALE AS SHOWN
SHEET NO. ### OF ###







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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

RECORD SET  
15% DESIGN  
SUBMITTAL  
  
NOT FOR  
CONSTRUCTION



CALIFORNIA  
HIGH-SPEED RAIL AUTHORITY

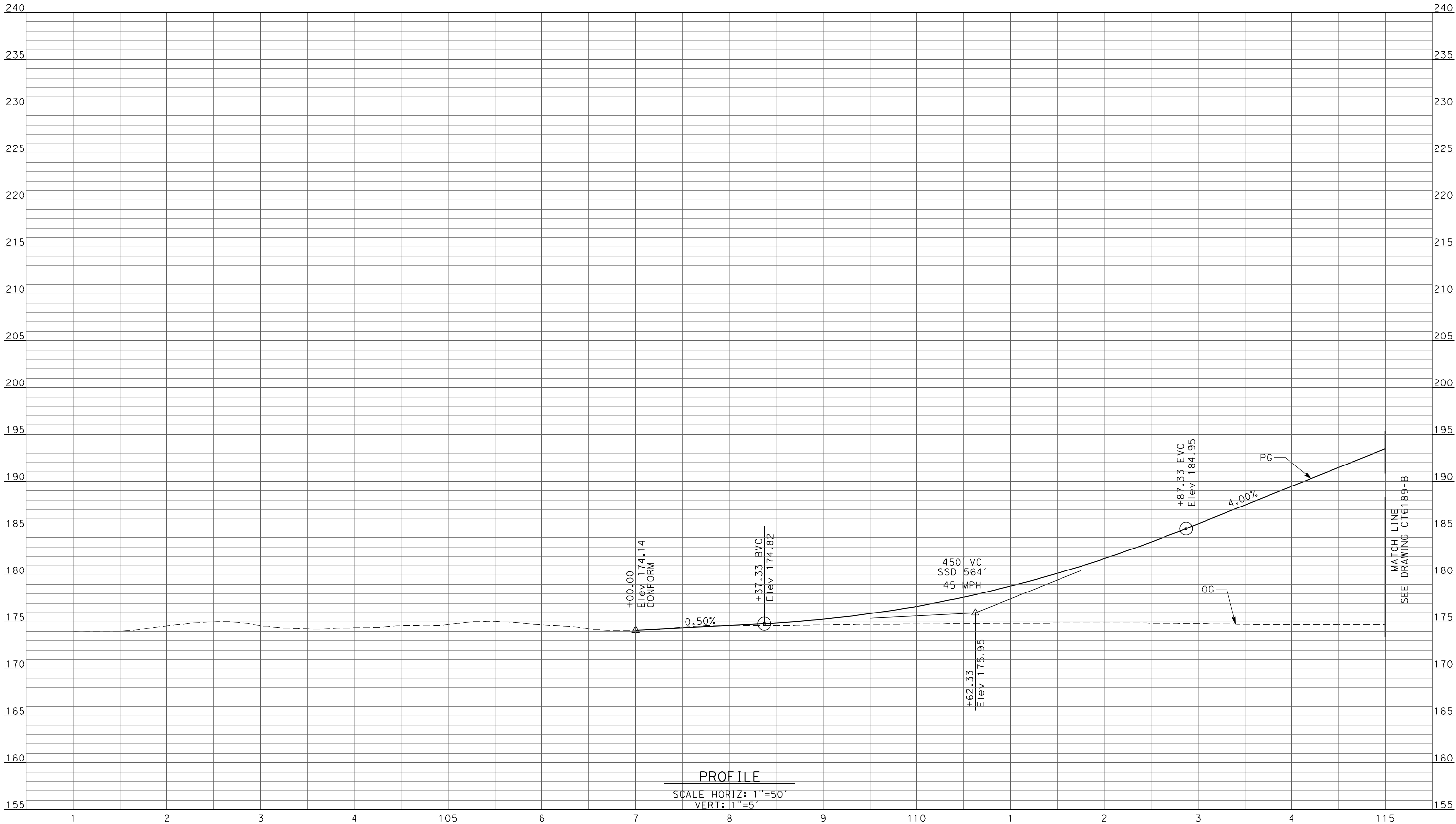
CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO  
UPRR/SR99 WYE/MERCED DO - (WC)  
UNDERPASS - AVENUE 26 ALT 2  
PROFILE  
SHEET 3 OF 3

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT6187-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



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ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

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CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811  
**CH2MHILL**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**

UPRR/SR99 MAINLINE/WYE - (AVE 24)  
GRADE SEPARATION - ROAD 9 ALONG EXIST ALT 2  
PROFILE  
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT6188-B
SCALE AS SHOWN
SHEET NO. ### OF ###





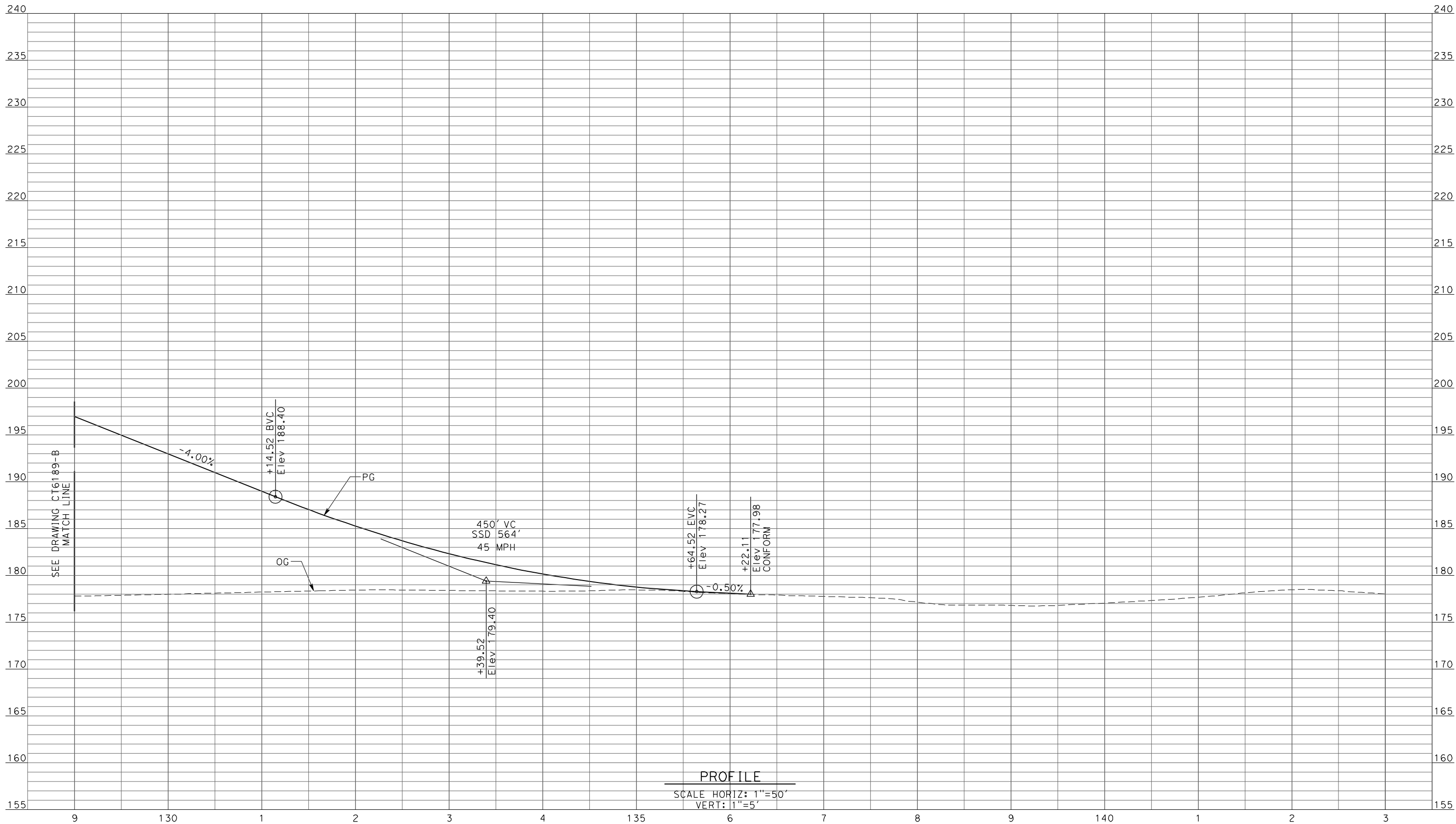
UPRR/SR99 MAINLINE/WYE - (AVE 24)  
GRADE SEPARATION - ROAD 9 ALONG EXIST ALT 2  
PROFILE  
SHEET 2 OF 3

CONTRACT NO.	HSR06-007
DRAWING NO.	CT6189-B
SCALE	AS SHOWN
SHEET NO.	### OF ###



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ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY D. AYELE
DRAWN BY C. DELOS REYES
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 04/29/2011

RECORD SET  
15% DESIGN  
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CALIFORNIA  
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO

UPRR/SR99 MAINLINE/WYE - (AVE 24)  
GRADE SEPARATION - ROAD 9 ALONG EXIST ALT 2  
PROFILE  
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. CT6190-B
SCALE AS SHOWN
SHEET NO. ### OF ###